

Arizona's
Instrument to Measure Standards

**Bookmark
Standard Setting
Technical Report**

for

**Grades 3, 5, 8, and High School
Reading & Mathematics**

Submitted to
Arizona Department of Education
June 2005

 **CTB
McGraw-Hill**

Developed and published under contract with the Arizona Department of Education by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2005 by the Arizona Department of Education. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the Arizona Department of Education and the publisher. This work is based on the Bookmark Standard Setting Procedure, copyright © 1999 by CTB/McGraw-Hill LLC. Bookmark Standard Setting Procedure is a trademark of The McGraw-Hill Companies, Inc.

AIMS Bookmark Standard Setting Technical Report

Table of Contents

Section A

Executive SummaryA1 to A3

Section B

Round-by-round Synopsis of the Standard Setting B1 to B13

Section C

Master Agenda for the AIMS Bookmark Standard Setting..... C1 to C8

Section D

Table Leader Training OverheadsD1 to D11

Section E

Participant Training Materials E1 to E21

Section F

Participant Evaluation of the AIMS Bookmark Standard Setting.....F1 to F16

Section G

Participants' Recommended Cut Scores Plus and Minus One, Two, and
Three Standard Errors with Associated Impact Data

Grade 3 MathematicsG1 to G3

Grade 5 MathematicsG4 to G6

Grade 8 MathematicsG7 to G9

High School MathematicsG10 to G12

Grade 3 ReadingG13 to G15

Grade 5 ReadingG16 to G18

Grade 8 ReadingG19 to G21

High School ReadingG22 to G24

Section H

Detailed Results of the Standard Setting

Grade 3 Mathematics	H1 to H20
Grade 5 Mathematics	H21 to H40
Grade 8 Mathematics	H41 to H60
High School Mathematics	H61 to H80
Grade 3 Reading	H81 to H100
Grade 5 Reading	H101 to H120
Grade 8 Reading	H121 to H145
High School Reading	H146 to H165

Section I

Graphical Representations of Participants' Judgments and Standard Errors

Grade 3 Mathematics	I1 to I12
Grade 5 Mathematics	I13 to I24
Grade 8 Mathematics	I25 to I36
High School Mathematics	I37 to I48
Grade 3 Reading	I49 to I60
Grade 5 Reading	I61 to I72
Grade 8 Reading	I73 to I84
High School Reading	I85 to I96

Section J

Cut Scores and Associated Impact Data for Grades 3 Through 8 and High School Mathematics and Reading Approved by the Arizona State Board of Education May 12, 2005	J1
--	----

Participant letters from Mathematics and Reading to the Arizona State Board of Education after Cross-grade Smoothing	J2 to J3
--	----------

Section A

Arizona Bookmark Standard Setting Overview

Executive Summary

Staff from CTB/McGraw-Hill conducted Arizona's Instrument to Measure Standards (AIMS) Standard Setting in Phoenix, Arizona, on May 9 – 11, 2005. The Classical Test Theory Bookmark Standard Setting Procedure (CTT-BSSP) was used to set standards for eight grade/content areas: Grades 3, 5, 8 and High School in Reading and Mathematics. For the CTT-BSSP, participants in each grade/content area participated in several rounds of activities in which they determined three cut scores (*Approaches, Meets, and Exceeds*), which define four performance levels: *Falls Far Below the Standard, Approaches the Standard, Meets the Standard*, and *Exceeds the Standard*.

The Body of Work Standard Setting Procedure (BoW-SSP) was used to set standards for Writing. Information about the BoW-SSP is contained in the report, Arizona Body of Work Standard Setting Technical Report for Grades 3, 5, 8, & High School Writing.

For the CTT-BSSP, participants were recruited from across the state of Arizona to establish the cut scores. Each grade/content area (e.g., Grade 3 Reading) had approximately 12 participants. Within each grade/content area, the Arizona Department of Education (ADE) divided participants into three groups that were balanced in terms of relevant demographic characteristics (e.g., geographic location, school size).

The AIMS CTT-BSSP consisted of training, orientation, four rounds of judgments (except for Grade 8 Reading, which engaged in five rounds), description writing, and cross-grade discussions for Table Leaders. Table Leaders from each grade convened for cross-grade discussions by content area to smooth the impact data, such that similar percentages of students would be classified in each performance level across grades within each content area.

Tables 1 and 2 summarize the CTT-BSSP cut scores and associated impact data for Mathematics and Reading, respectively. These data were recommended by participants after the final round (Round 4, except for Grade 8 Reading, which had Round 5) of discussion and voting. The impact data in Table 1 reflect the data that were shown to participants at the time of the standard setting. The impact data were based on the Spring 2005 administration of the test. For Grades 3, 5, and 8, the impact data were based on a representative sample of students in the state. For High School, the impact data were based on the entire population.

**Table 1. Mathematics Participant-recommended Cut Scores and Associated Impact
Data Based on Round 4**

MATH	Cut Scores			Associated Impact Data			
Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>
3	386	420	492	9.5%	18.5%	51.1%	20.9%
5	430	476	550	7.4%	23.3%	49.7%	19.6%
8	491	556	623	10.6%	38.5%	37.3%	13.6%
HS 10	668	683	750	21.7%	11.7%	49.4%	17.2%

**Table 2. Reading Participant-recommended Cut Scores and Associated Impact
Data Based on Round 4 (* = Round 5)**

READING	Cut Scores			Associated Impact Data			
Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>
3	379	431	516	8.7%	24.8%	56.2%	10.3%
5	417	474	545	6.8%	30.2%	50.3%	12.7%
8*	439	494	591	4.5%	23.4%	60.0%	12.1%
HS 10	627	670	753	7.6%	19.0%	57.3%	16.1%

After the final round, the Table Leaders convened for cross-grade discussions in each content area to smooth the impact data, such that the system of cut scores was well-articulated. Tables 3 and 4 summarize the cut scores and associated impact data that were recommended by participants during the cross-grade smoothing discussions for Mathematics and Reading, respectively.

During smoothing for Mathematics, Grade 5 raised their *Approaches* cut score, Grade 8 raised their *Approaches* cut score, and Grade 8 lowered their *Meets* cut score.

**Table 3. Mathematics Participant-recommended Cut Scores and Associated Impact
Data after Cross-grade Smoothing**

Smoothed MATH	Cut Scores			Associated Impact Data			
Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>
3	386	420	492	9.5%	18.5%	51.1%	20.9%
5	442	476	550	11.5%	19.2%	49.7%	19.6%
8	505	537	623	16.5%	19.1%	50.7%	13.6%
HS 10	668	683	750	21.7%	11.7%	49.4%	17.2%

During the cross-grade smoothing discussions for Reading, Grade 5 participants raised their *Approaches* and *Exceeds* cut scores and lowered their *Meets* cut score. Grade 8 participants raised all of their cut scores, and Grade 11 participants raised their *Meets* and *Exceeds* cut scores.

Table 4. Reading Participant-recommended Cut Scores and Associated Impact Data after Cross-grade Smoothing

Smoothed READING	Cut Scores			Associated Impact Data			
	Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>
3	379	431	516	8.7%	24.8%	56.2%	10.3%
5	424	468	556	9.4%	23.0%	58.7%	9.0%
8*	452	499	602	7.9%	23.2%	59.9%	9.0%
HS 10	627	674	773	7.6%	21.2%	62.9%	8.3%

Following the standard setting, cut scores were interpolated for Grades 4, 6, and 7 from the cuts set for Grades 3, 5, and 8. Section J presents the final cut scores and estimated impact data for Grades 3 through 8 and high school for the AIMS tests for Mathematics and Reading, as approved by the Arizona State Board of Education on May 12, 2005.

This technical report summarizes the results of the AIMS Standard Setting for Reading and Mathematics, which was conducted using the Classical Test Theory Bookmark Standard Setting Procedure. Section B presents a round-by-round synopsis of the workshop. Section C includes the Master Agenda. Section D contains the overheads presented to Table Leaders and participants during training and orientation. Section E provides a copy of all training materials given to participants. This section also includes the check set and its results. Section F presents the results of the participant evaluation of the AIMS Standard Setting. Section G provides estimates of the percent of students in each performance level at plus/minus one, two, and three standard errors of the participants' recommended Round 4 (Round 5 for Grade 8 Reading) cut scores for each grade/content area. Section H presents detailed results of the participants' judgments for each grade/content area. Section I contains graphical representations of participants' Round 4 (Round 5 for Grade 8 Reading) judgments and standard errors. Section J presents the final cut scores and estimated impact data for Grades 3 through 8 and high school for the AIMS tests for Mathematic and Reading, as approved by the Arizona State Board of Education on May 12, 2005. The letters participants from each content area (Mathematics and Reading) wrote to the Arizona State Board of Education after cross-grade smoothing are included in Section J.

Section B

Round-by-round Synopsis of the Bookmark Standard Setting

AIMS Bookmark Standard Setting

Staff from CTB/McGraw-Hill conducted Arizona's Instrument to Measure Standards (AIMS) Standard Setting in Phoenix, Arizona, on May 9 – 11, 2005. The Classical Test Theory Bookmark Standard Setting Procedure (CTT-BSSP) was used to set standards for eight grade/content areas: Grades 3, 5, 8 and High School in Reading and Mathematics. For the CTT-BSSP, participants in each grade/content area participated in several rounds of activities in which they determined three cut scores (*Approaches, Meets, and Exceeds*), which define four performance levels: *Falls Far Below the Standard, Approaches the Standard, Meets the Standard, and Exceeds the Standard*.

The Body of Work Standard Setting Procedure (BoW-SSP) was used to set standards for Writing. Information about the BoW-SSP is contained in the report, *Arizona Body of Work Standard Setting Technical Report for Grades 3, 5, 8, and High School Writing*.

For the CTT-BSSP, participants were recruited from across the state of Arizona to establish the cut scores. Each grade/content area (e.g., Grade 3 Reading) had approximately 12 participants. Within each grade/content area, the Arizona Department of Education (ADE) divided participants into three groups that were balanced in terms of relevant demographic characteristics (e.g., geographic location, school size).

The AIMS CTT-BSSP consisted of training, orientation, four rounds of judgments (except for Grade 8 Reading, which engaged in five rounds), description writing, and cross-grade discussions for Table Leaders. Table Leaders from each grade within a content area convened for cross-grade discussions to smooth the impact data, such that similar percentages of students would be classified in each performance level.

The AIMS Standard Setting lasted three days, with the first half-day devoted to Table Leader training, and the remaining two-and-a-half days for standard setting and description writing.

Bookmark Roles

CTB Staff

The CTB Standard Setting Team worked with staff from ADE to design, organize and conduct the Arizona Standard Setting. The CTB Standard Setting Team was comprised of Karla Egan, Ph.D., Bruce Randel, Ph.D., Michaela Gelin, Ph.D., Ricardo Mercado, Adele Brandstrom, Dorothy Tele'a, Mike Chia, and Michelle Shaw. Dr. Egan is CTB's Research Project Manager for all standard setting activities and workshops. Dr. Gelin is a Research Scientist for CTB's Standard Setting Team. Mr. Mercado and Ms. Brandstrom are Standard Setting Specialists and Ms. Tele'a is a Research Associate for CTB's Standard Setting Team. Dr. Randel is CTB's Research Monitor for the Arizona contract, Ms. Shaw is a Research Staff Assistant, and Mr. Chia is a Business Process Analyst for Research.

Prior to the AIMS Standard Setting, this team prepared all materials for the workshop. During the AIMS Standard Setting workshop, this team was responsible for facilitating the workshop, training participants, entering participant results into a database, and tracking secure materials. Following the workshop, this team prepared the Standard Setting Technical Report.

The following people worked on the Arizona contract at CTB and attended the AIMS Standard Setting: Cynthia Fischer, Program Manager; Lindy Desmond, Program Coordinator; Jessica Breznak, On-site Coordinator; and Francine McKenty, Development Project Manager.

Group Leaders

Group Leaders essentially administrated the standard setting for those major portions in which participants were working. In each grade/content area, the Group Leader served as a facilitator and was in charge of time management, focusing the participants on the task at hand, and interacting with the participants. The Group Leader also facilitated large-group discussions in Rounds 3 and 4 following the presentation of impact data. The Group Leaders were also in charge of security and data management. They collected the bookmark data from participants and communicated with CTB Research and ADE staff. The Group Leaders did not vote in their grade/content areas. The Group Leaders for each grade/content area were provided by CTB and are summarized in Table 1.

Table 1. Group Leaders by grade/content area

Grade	Mathematics	Reading
3	Ric Garrido	Teresa Park
5	Darren Schmidt	Joshua Pierce
8	Dan Dube	Gale Weir
HS	Mary Foster	Kellie Crain

Table Leaders

Each grade/content area had three Table Leaders. Table Leaders were voting participants in their grade/content areas. Their primary role was to monitor the group discourse, which included keeping their groups focused on the tasks, facilitating discussions, and helping maintain the schedule.

Participants

ADE invited approximately 12 participants per grade/content area from across Arizona to recommend cut scores for the AIMS. Participants provided expertise and insights to help set the performance standards for the AIMS tests and were full, voting members of their standard setting committees. Table 2 shows the number of participants in each grade/content area. Within each grade/content area ADE divided participants into three groups that were balanced in terms of relevant demographic characteristics (e.g., geographic location, school size). Each group had a Table Leader. Following the standard setting, participants completed evaluations from which demographic information about the participants was summarized. Tables 3 and 4 show the educational background and work experience, respectively, of the participants in each grade/content area.

Table 2. Number of participants in each grade/content area

Grade	Mathematics	Reading
3	12	11
5	11	11
8	12	11
HS	12	10

Table 3. Educational background of participants in each grade/content area

Content Area	Grade	N	Bachelor's	Master's	Doctorate
Mathematics	OVERALL	87	23.0%	74.7%	2.3%
	3	11	27.3%	72.7%	0.0%
	5	11	9.1%	90.9%	0.0%
	8	11	36.4%	63.6%	0.0%
Reading	High School	12	25.0%	66.7%	8.3%
	3	12	25.0%	75.0%	0.0%
	5	10	40.0%	50.0%	10.0%
	8	10	0.0%	100.0%	0.0%
	High School	10	20.0%	80.0%	0.0%

Table 4. Work experience of participants in each grade/content area

Content Area	Grade	N	1-5	6-10	11-15	16-20	21+
Mathematics	OVERALL	87	6.9%	29.9%	17.2%	17.2%	28.7%
	3	11	0.0%	0.0%	27.3%	18.2%	54.5%
	5	11	18.2%	36.4%	9.1%	18.2%	18.2%
	8	11	0.0%	54.5%	27.3%	9.1%	9.1%
Reading	High School	12	0.0%	25.0%	16.7%	25.0%	33.3%
	3	12	0.0%	25.0%	8.3%	25.0%	41.7%
	5	10	10.0%	40.0%	20.0%	0.0%	30.0%
	8	10	20.0%	20.0%	10.0%	20.0%	30.0%
	High School	10	10.0%	40.0%	20.0%	20.0%	10.0%

Bookmark Materials

Ordered Item Booklets

The Ordered Item Booklets (OIBs) were comprised of operational items from the Spring 2005 AIMS tests. Table 5 lists the number of items in each OIB by grade/content area.

Table 5. Number of items in each Ordered Item Booklet by grade/content area

Grade	Mathematics	Reading
3	72	54
5	68	54
8	66	54
High School	85	54

Item Maps

The item maps summarize the material in the OIB. The item maps consisted of nine columns: the first column indicated the item's order of difficulty, the second column indicated the p -value, the third column indicated the item location, the fourth column reported the test session, the fifth column showed the actual item number on the AIMS test, the sixth column reported the score key (which is the correct response for multiple-choice items), and the seventh column provided the content strand and concept. Participants filled in the final two columns as they studied the items in the OIB. The first of these columns asked, "What does this item measure? That is, what do you know about a student who can respond successfully to this item." The last column asked, "Why is this item more difficult than the preceding items?"

Standard Setting: Morning of Day 1

Training

Table Leaders were trained on the morning of the first day of the AIMS Standard Setting. During this training session, which lasted about three-and-a-half hours, Table Leaders were given an overview of the reasons for standard setting and were trained specifically on the Classical Test Theory Bookmark Standard Setting Procedure (CTT-BSSP). They were given a synopsis of each day's activities as well as their responsibilities on each day. The Master Agenda is included in Section C and the training overheads presented to the Table Leaders are included in Section D. The Table Leaders participated in a mock standard setting using a sample OIB. This sample OIB is included in Section E. During the mock standard setting, the Table Leaders practiced all activities that would occur in each round of the CTT-BSSP. The Group Leaders acted as Table Leaders during the mock standard setting to demonstrate the type of behavior expected of Table Leaders. All training materials are included in Section E.

Target Student Definitions

After training in the CTT-BSSP, the Table Leaders in each grade/content area discussed Target Students for *Approaches*, *Meets*, and *Exceeds the Standard* performance levels. A Target Student is a student whose performance is equivalent to the minimum score required for entry into a particular performance level. Table Leaders were directed to use

the Arizona Academic Content Standards to develop the Target Student definitions. These Target Student definitions served as a basis for establishing a common understanding of the types of students who should be considered *Approaches*, *Meets*, and *Exceeds* on the AIMS for Grades 3, 5, 8 and High School in Reading and Mathematics.

Standard Setting: Afternoon of Day 1

Orientation

Staff from the ADE and CTB welcomed the participants to the AIMS Standard Setting. Dr. Donna W. Lewis, Arizona Associate Superintendent of Education, provided a brief overview of the history of the testing program and described the review procedures that would follow the standard setting. Dr. Michaela Gelin, CTB Research Scientist, provided an overview of standard setting. Dr. Karla Egan, CTB Research Project Manager, introduced the Classical Test Theory Bookmark Standard Setting Procedure (CTT-BSSP) to all participants. The participants were trained on the use of their OIBs and item maps. The training overheads are included in Section D.

Breakout Rooms: Take the Test, Discuss Target Student Definitions

In their breakout rooms, participants spent approximately one hour taking the AIMS operational test for their respective grade/content areas. Table Leaders then lead their groups in discussions of the knowledge, skills, and abilities expected of the Target Students. Each group was given the opportunity to revise these descriptors.

Study of Items in the Ordered Item Booklet

Participants at each table studied the items in the OIB in terms of what each item measures and why it is more difficult than the items preceding it.

Standard Setting: Day 2

Complete Study of Items in the Ordered Item Booklet

Participants at each table completed the examination of the items in the OIB in terms of what each item measures and why it is more difficult than the items preceding it.

Bookmark Training

Ricardo Mercado and Dr. Egan trained participants on how to place their bookmarks. Participants were given training materials and three explanations of bookmark placement. The training materials titled “Bookmark Placement” and “Frequently Asked Questions about Bookmark Placement” were read aloud. The first explanation of bookmark placement demonstrated the mechanics; participants were instructed that all items preceding the bookmark define the knowledge, skills, and abilities that a *Meets* student, for example, is expected to have command of. The second explanation of bookmark placement was more conceptual in that participants were instructed to examine each item in terms of its content and to make a judgment about the type of content that a student would need to have command of in order to be considered *just Meets*. The final explanation of bookmark placement discussed the concept of command. The bookmark training materials are included in Section E.

The participants were tested on their understanding of bookmark placement with a short check set. The check set questions and the results are presented in Tables 6 and 7, respectively. Participants were then given the correct answers for the check set as well as explanations of those answers. The check set (and the graphic that appears with it) and its results are included in Section E.

Table 6. Questions in the Check Set that Followed Bookmark Training

	Question
1.	Which items does a student need to have command of to just make it into the <i>Meets</i> performance level?
2.	If a student has command of only items 1 through 9, in which performance level would this student be?
3.	Suppose a student has command of item 1 through 10. Which performance level is this student in?
4.	Will the items BEFORE the <i>Meets</i> bookmark be more or less difficult to answer than the items AFTER the bookmark or about the same?

Table 7. Results of the Check Set

Question	Mathematics (N = 45)		Reading (N = 41)	
	Count Correct	Percent Correct	Count Correct	Percent Correct
1	43	96%	38	93%
2	42	93%	33	80%
3	39	87%	38	93%
4	45	100%	39	95%

Round 1

Once participants indicated that they understood bookmark placement, they placed their Round 1 bookmarks for *Approaches*, *Meets*, and *Exceeds*, while keeping in mind their Target Students definitions and the Arizona Academic Content Standards. Participants were instructed that bookmark placement is always an individual activity.

Round 2

At the beginning of Round 2, a member of the CTB Standard Setting Team, working with an ADE representative, presented participants with aggregate impact data based on their Round 1 bookmark placements. CTB staff answered process-related questions, and ADE staff answered all policy-related questions concerning the impact data. It was emphasized to the participants that the impact data were being presented as a “reality check.”

Table Leaders then facilitated participant discussions of their bookmark placements in small groups at their tables. Participants were instructed to discuss those items for which there was disagreement within the small group; thus, they discussed the range of items between the lowest and highest bookmarks for each performance level. After this discussion, participants again placed their bookmarks. Participants were reminded that bookmark placement is always an individual activity.

Round 3

At the beginning of Round 3, a member of the CTB Standard Setting Team, working with an ADE representative, presented participants with aggregate impact data based on their Round 2 bookmark placements, similar to the presentations of Round 2. The Group Leaders then facilitated discussion among the participants on their bookmark placements. After discussion, participants again placed bookmarks. Participants were reminded that bookmark placement is always an individual activity.

Standard Setting: Day 3

Round 4

Following Round 3, participants in Grades 3, 5, and 8 Mathematics and Grades 3 and 8 Reading convened by content area in separate rooms for the presentation of aggregate cross-grade impact data. The cross-grade data presented were for Grades 3 through 8 and were based on the Round 3 bookmarks (except for Grade 5 Reading, which was based on the Round 2 bookmarks). The impact data were based on representative samples of student responses from the 2005 AIMS Spring Administration. A member of the CTB Standard Setting Team, working with an ADE staff member, presented these results and discussed the need for well-articulated impact data.

After Grade 5 Reading completed their Round 3 discussion and voting, aggregate cross-grade impact data were presented to them.

In separate rooms, the High School Mathematics and Reading groups convened for the presentation of aggregate cross-grade impact data, which were based on the Round 3 bookmarks. The cross-grade data presented were for Grades 10/11 combined, Grade 10, and Grade 11. The impact data were based on the entire population. A member of the CTB Standard Setting Team, working with an ADE staff member, presented these results and discussed the need for well-articulated impact data.

After the cross-grade discussions, participants returned to their breakout rooms to continue their discussion of their Round 3 bookmarks and the cross-grade impact data. Participants were given the opportunity to place bookmarks a fourth time.

Round 4 Results

Participants were shown their final median bookmarks and the associated aggregate impact data and cross-grade data. Tables 8 and 9 summarize the participant-recommended cut scores and associated impact data based on the final round of voting (Round 4, except for Grade 8 Reading, which voted Round 5) for each grade/content area for Mathematics and Reading, respectively.

Table 8. Mathematics Participant-recommended Cut Scores and Associated Impact Data Based on Round 4

MATH	Cut Scores			Associated Impact Data			
Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>
3	386	420	492	9.5%	18.5%	51.1%	20.9%
5	430	476	550	7.4%	23.3%	49.7%	19.6%
8	491	556	623	10.6%	38.5%	37.3%	13.6%
HS 10	668	683	750	21.7%	11.7%	49.4%	17.2%

Table 9. Reading Participant-recommended Cut Scores and Associated Impact Data Based on Round 4 (* = Round 5)

READING	Cut Scores			Associated Impact Data			
Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>
3	379	431	516	8.7%	24.8%	56.2%	10.3%
5	417	474	545	6.8%	30.2%	50.3%	12.7%
8*	439	494	591	4.5%	23.4%	60.0%	12.1%
HS 10	627	670	753	7.6%	19.0%	57.3%	16.1%

Evaluations

Following the presentation of final results, participants were asked to complete an evaluation of the AIMS Standard Setting. The results of the evaluation are included in Section F of this report.

Cross-Grade Smoothing

Following the presentation of final results to participants in each grade/content area, Table Leaders from each grade/content area convened by content area to examine the impact data associated with their recommendations. The purpose of this smoothing discussion was to establish a system of cut scores that was well-articulated and, at the same time, considerate of the participants' original recommendations.

Representatives from CTB and ADE facilitated the cross-grade smoothing discussions. Participants discussed their Round 4 (Round 5 for Grade 8 Reading) recommendations and the percentage of students they expected in each performance level.

Tables 10 and 11 show, for Mathematics and Reading, respectively, the smoothed participant-recommended cut scores developed during the smoothing discussions, as well as the associated impact data.

During smoothing for Mathematics, Grade 5 raised their *Approaches* cut score, Grade 8 raised their *Approaches* cut score, and Grade 8 lowered their *Meets* cut score.

During smoothing for Reading, Grade 5 participants raised their *Approaches* and *Exceeds* cut scores and lowered their *Meets* cut score. Grade 8 participants raised all of their cut scores, and Grade 11 participants raised their *Meets* and *Exceeds* cut scores.

The letters participants from each content area (Mathematics and Reading) wrote to the Arizona State Board of Education after cross-grade smoothing are included in Section J.

Table 10. Mathematics Participant-recommended Cut Scores and Associated Impact Data after Cross-grade Smoothing

Smoothed MATH	Cut Scores			Associated Impact Data			
	Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>
3	386	420	492	9.5%	18.5%	51.1%	20.9%
5	442	476	550	11.5%	19.2%	49.7%	19.6%
8	505	537	623	16.5%	19.1%	50.7%	13.6%
HS 10	668	683	750	21.7%	11.7%	49.4%	17.2%

Table 11. Reading Participant-recommended Cut Scores and Associated Impact Data after Cross-grade Smoothing

Smoothed READING	Cut Scores			Associated Impact Data			
	Grade	<i>Approaches</i>	<i>Meets</i>	<i>Exceeds</i>	<i>F.F. Below</i>	<i>Approaches</i>	<i>Meets</i>
3	379	431	516	8.7%	24.8%	56.2%	10.3%
5	424	468	556	9.4%	23.0%	58.7%	9.0%
8*	452	499	602	7.9%	23.2%	59.9%	9.0%
HS 10	627	674	773	7.6%	21.2%	62.9%	8.3%

Descriptors

While Table Leaders were engaged in the cross-grade smoothing discussions, the remainder of the standard setting committee members wrote performance-level descriptors that detail the knowledge, skills, and abilities needed to be classified in each performance level for Grades 3, 5, 8 and High School in Reading and Mathematics.

Effectiveness of Training

An indication of the effectiveness of training may be found in the participants' answers to statements and questions on the evaluations. Table 12 shows the percentage of participants who agreed or disagreed that they understood how to place a bookmark. Most participants agreed or strongly agreed that they understood how to place their bookmarks. Table 13 summarizes the percentage of participants who agreed or disagreed that bookmark training made the task of bookmark placement clear. Most participants agreed or strongly agreed that the task of bookmark placement was clear. Table 14 summarizes the percentage of participants in each grade who agreed or disagreed that the training materials were helpful. Most participants agreed or strongly agreed that the training materials were helpful, with the exception of Grade 5 Reading. Table 15 shows the percentage of participants who agreed or disagreed that the Bookmark Procedure was described well. Most participants agreed or strongly agreed that the Bookmark Procedure

was well described. The percentage of participants who agreed or disagreed that the goals of the process were clear to them is summarized in Table 16. Most participants agreed or strongly agreed that the goals of the process were clear, except for Grade 5 Reading.

Table 12. Participants' Agreement/Disagreement with the Statement, “I understood how to place my bookmark.”

Content Area	Grade	N	Strongly Disagree				Strongly Agree	
			Disagree	Neutral	Agree	Agree		
	OVERALL	89	0.0%	1.1%	1.1%	36.0%	61.8%	
Mathematics	3	11	0.0%	0.0%	0.0%	45.5%	54.5%	
	5	11	0.0%	0.0%	0.0%	45.5%	54.5%	
	8	11	0.0%	0.0%	0.0%	27.3%	72.7%	
	High School	12	0.0%	0.0%	0.0%	41.7%	58.3%	
Reading	3	12	0.0%	0.0%	0.0%	41.7%	58.3%	
	5	11	0.0%	9.1%	9.1%	36.4%	45.5%	
	8	11	0.0%	0.0%	0.0%	27.3%	72.7%	
	High School	10	0.0%	0.0%	0.0%	20.0%	80.0%	

Table 13. Participants' Agreement/Disagreement with the Statement, “The training on Bookmark placement made the task clear to me.”

Content Area	Grade	N	Strongly Disagree			Strongly Agree	
			Disagree	Neutral	Agree	Agree	
	OVERALL	89	0.0%	1.1%	3.4%	34.8%	60.7%
Mathematics	3	11	0.0%	0.0%	0.0%	54.5%	45.5%
	5	11	0.0%	0.0%	0.0%	36.4%	63.6%
	8	11	0.0%	0.0%	9.1%	9.1%	81.8%
	High School	12	0.0%	8.3%	0.0%	33.3%	58.3%
Reading	3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	5	11	0.0%	0.0%	0.0%	63.6%	36.4%
	8	11	0.0%	0.0%	9.1%	27.3%	63.6%
	High School	10	0.0%	0.0%	10.0%	30.0%	60.0%

Table 14. Participants' Agreement/Disagreement with the Statement, “The training materials were helpful.”

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Mathematics	OVERALL	89	0.0%	2.2%	6.7%	36.0%	55.1%
	3	11	0.0%	9.1%	0.0%	45.5%	45.5%
	5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	8	11	0.0%	0.0%	0.0%	36.4%	63.6%
Reading	High School	12	0.0%	8.3%	8.3%	50.0%	33.3%
	3	12	0.0%	0.0%	8.3%	16.7%	75.0%
	5	11	0.0%	0.0%	27.3%	36.4%	36.4%
	8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	10	0.0%	0.0%	10.0%	20.0%	70.0%

Table 15. Participants' Agreement/Disagreement with the Statement, “The Bookmark Standard Setting Procedure was well described.”

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Mathematics	OVERALL	89	0.0%	0.0%	2.2%	43.8%	53.9%
	3	11	0.0%	0.0%	0.0%	45.5%	54.5%
	5	11	0.0%	0.0%	0.0%	54.5%	45.5%
	8	11	0.0%	0.0%	9.1%	27.3%	63.6%
Reading	High School	12	0.0%	0.0%	0.0%	41.7%	58.3%
	3	12	0.0%	0.0%	0.0%	33.3%	66.7%
	5	11	0.0%	0.0%	9.1%	54.5%	36.4%
	8	11	0.0%	0.0%	0.0%	45.5%	54.5%
	High School	10	0.0%	0.0%	0.0%	50.0%	50.0%

Table 16. Participants' Agreement/Disagreement with the Statement, "The goals of this procedure were clear."

Content Area	Grade	N	Strongly Disagree				Strongly Agree	
			Disagree	Neutral	Agree	Agree		
	OVERALL	89	0.0%	1.1%	6.7%	31.5%	60.7%	
Mathematics	3	11	0.0%	0.0%	0.0%	36.4%	63.6%	
	5	11	0.0%	0.0%	0.0%	63.6%	36.4%	
	8	11	0.0%	0.0%	0.0%	18.2%	81.8%	
	High School	12	0.0%	0.0%	0.0%	33.3%	66.7%	
Reading	3	12	0.0%	0.0%	8.3%	16.7%	75.0%	
	5	11	0.0%	9.1%	18.2%	36.4%	36.4%	
	8	11	0.0%	0.0%	9.1%	18.2%	72.7%	
	High School	10	0.0%	0.0%	20.0%	30.0%	50.0%	

Perceived Validity

Another indication of the successfulness of the Standard Setting may be found in the participants' perceived validity of the CTT-BSSP itself. Table 17 shows the percentage of participants who agreed/disagreed that the Bookmark Procedure produced valid cut scores. Most participants agreed or strongly agreed that the Bookmark Procedure produced valid cut scores, except for High School Reading. Table 18 shows that the participants' satisfaction with their group's final bookmarks. Most participants agreed or strongly agreed that they were satisfied with their group's final bookmarks, except for Grade 5 Reading.

Table 17. Participants' Agreement/Disagreement with the Statement, "I am confident that the Bookmark Procedure produced valid standards."

Content Area	Grade	N	Strongly Disagree				Strongly Agree	
			Disagree	Neutral	Agree	Agree		
	OVERALL	85	0.0%	0.0%	7.1%	44.7%	48.2%	
Mathematics	3	10	0.0%	0.0%	10.0%	50.0%	40.0%	
	5	10	0.0%	0.0%	0.0%	70.0%	30.0%	
	8	11	0.0%	0.0%	0.0%	36.4%	63.6%	
	High School	12	0.0%	0.0%	8.3%	33.3%	58.3%	
Reading	3	12	0.0%	0.0%	0.0%	25.0%	75.0%	
	5	10	0.0%	0.0%	20.0%	50.0%	30.0%	
	8	11	0.0%	0.0%	0.0%	54.5%	45.5%	
	High School	9	0.0%	0.0%	22.2%	44.4%	33.3%	

Table 18. Participants' Agreement/Disagreement with the Statement, “Overall, I was satisfied with my group’s final bookmarks.”

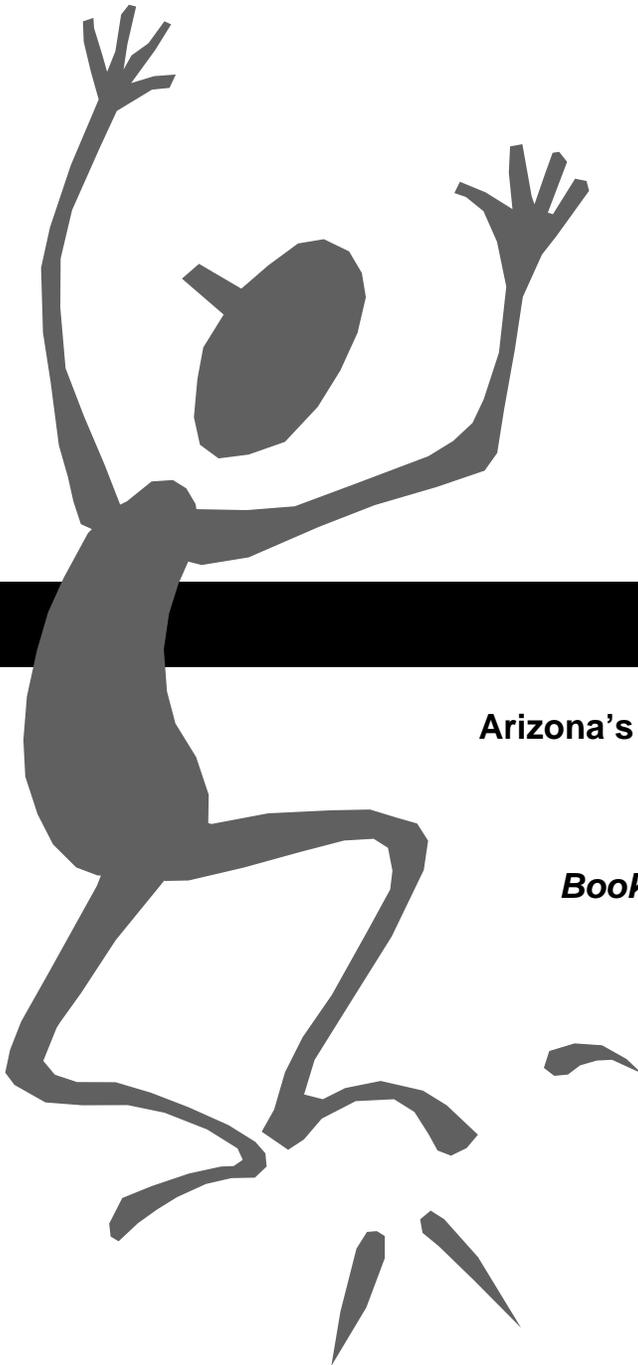
Content Area	Grade	N	Strongly Disagree				Strongly Agree	
			Disagree	Disagree	Neutral	Agree	Agree	
	OVERALL	89	1.1%	2.2%	1.1%	31.5%	64.0%	
Mathematics	3	11	0.0%	0.0%	0.0%	18.2%	81.8%	
	5	11	0.0%	0.0%	0.0%	45.5%	54.5%	
	8	11	0.0%	0.0%	0.0%	27.3%	72.7%	
	High School	12	0.0%	0.0%	0.0%	0.0%	100.0%	
Reading	3	12	0.0%	0.0%	0.0%	25.0%	75.0%	
	5	11	9.1%	9.1%	9.1%	27.3%	45.5%	
	8	11	0.0%	0.0%	0.0%	63.6%	36.4%	
	High School	10	0.0%	10.0%	0.0%	50.0%	40.0%	

Quality Control Procedures

The CTB Standard Setting Team adheres to many quality control procedures to foster the accuracy of the materials used and the results presented during the standard setting. Prior to the workshop, the Standard Setting Team cross-checks the ordering of items in the Ordered Item Booklets, the accuracy of the information in the Item Maps, and the accuracy of the Microsoft Excel macros and Bookmark PRO software used to generate results and impact data. During the workshop, all data is scanned. Any results that appear to be questionable are further investigated. Any results that appear to be questionable are further investigated by the Standard Setting Project Manager, in consultation with the Standard Setting Team and CTB Research staff.

Section C

Master Agenda for the AIMS Bookmark Standard Setting

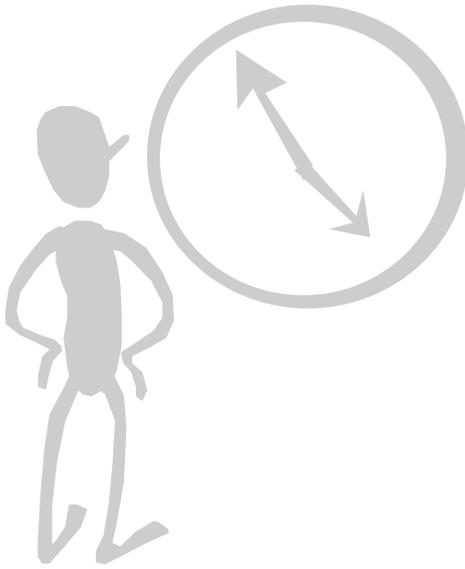


Master Agenda

**Arizona's Instrument to Measure Standards
Grades 3, 5, 8, and High School
Reading and Mathematics**

Bookmark Standard Setting Workshop

**May 9 – 11, 2005
Phoenix, Arizona**



Welcome to the Bookmark Standard Setting Workshop for Arizona's Instrument to Measure Standards for Reading and Mathematics for Grades 3, 5, 8, and High School.

The Arizona Department of Education and CTB/McGraw-Hill would like to thank you for your time and expertise during this important process.

Please use this agenda to orient yourself during the workshop. If you have any questions or concerns, please do not hesitate to contact a member of the CTB Standard Setting Team.

Monday, May 9

Welcome!

8:00 AM Table Leader registration and continental breakfast¹

Please check in at the reception area to sign a non-disclosure agreement, get your nametag, and collect any other information. Continental breakfast is served.

8:30 AM Table Leader training

You will receive an overview of the standard setting workshop, learn how the Bookmark Standard Setting Procedure works, and discuss your role and responsibilities during the workshop.

10:30 AM Target Student discussion

Table Leaders engage in structured discussions about the knowledge, skills, and abilities they expect to be demonstrated by students in each performance level.

11:00 AM Participant registration

Participants check-in at the reception table. Table Leaders need not register again.

12:00 PM Lunch

1:00 PM Opening Session

All participants are formally welcomed and receive an overview of how the Standard Setting workshop will work. After an introduction, the participants for Writing will leave for a separate training room.

1:30 PM Bookmark Overview

Participants in Reading and Mathematics will be introduced to the Bookmark Standard Setting Procedure.

¹ A 15-minute break will be held at 10:30 am and 2:30 pm each day.

- 2:00 PM Dismissal into Pre-assigned Breakout Rooms**
The Group Leader welcomes participants to the group and distributes secure materials.
- Ensure that all participants at your table write their name on each of their secure materials. All secure materials, except for the test book, are printed on colored paper.
- 2:30 PM Take the operational test**
Participants take the test under conditions similar to those experienced by students.
- Although some discussion about individual test items is normal, focus your participants away from prolonged debate and toward taking the test.
 - Participants use provided index cards to record comments about test items.
- 3:15 PM Target Student discussion**
- There are three Target Students that participants need to think about: *Just Approaches*, *Just Meets*, and *Just Exceeds*. A Target Student is a student who just makes it into a performance level. The group discusses the knowledge, skills, and abilities expected of these Target Students.
- 4:00 PM Begin discussion of each item in the Ordered Item Booklet (OIB)**
The Group Leader introduces this exercise by instructing participants find the Item Map in their secure materials, then reviewing the purpose of each column.
- Facilitate a discussion amongst everyone at your table about each of the items in the OIB. Start with the first item, and discuss each item in turn, focusing on what each item measures and what makes it harder than the previous items. All participants record these details on their Item Maps.
 - Assign a scribe to take a master set of notes for your table.
 - Remember to use the index cards, as necessary.
 - Ensure that each participant at your table has a chance to speak.
- 5:45 PM Secure materials collection**
The Group Leader facilitates collection of the secure materials from all participants. A listing of secure materials to be collected is displayed in the room.
- Supervise the collection of secure materials at your tables. See the “Secure Materials” page in this agenda for more information.
- 6:00 PM Secure materials audit**
The Group Leader asks the Table Leaders to audit the secure materials at one other table.
- Order materials numerically by packet number within each table.
 - Verify that all signed-out packets are present.
 - Stack materials at each table neatly into one pile with the table tent on top, under the top packet’s rubber band.
 - Place the separate stacks on one table. Do not combine tables’ stacks.
- 6:15 PM Table Leader debriefing**
Table Leaders discuss the events of the day and plans for the next day.
- 6:30 PM Table Leader dismissal**

8:00 AM Continental breakfast

8:30 AM Continue discussion of each item in the Ordered Item Booklet (OIB)

Groups continue the discussion of each of the items in the OIB.

- Remember to use the index cards, as necessary.
- Ensure that each participant at your table has a chance to speak.

12:00 PM Lunch

1:00 PM Orientation to bookmark placement and Round 1 ratings

A member of the CTB Standard Setting Team introduces bookmark placement, explaining how bookmarks are placed and what bookmarks mean. After this brief presentation, a short check set is given, followed immediately by Round 1 bookmark placement.

- See “Bookmark Placement” for more info.
- Remind participants that bookmark placement is always an individual activity.
- Collect your participants’ Rating Forms as they complete them, ensuring that each participant has made a single, unambiguous rating for each bookmark.
- Give your participants’ Rating Forms to the Group Leader.

2:00 PM Discussion of Round 1 as a table

After results are presented, lead a discussion surrounding the ratings made at your table.

3:30 PM Round 2 ratings

After Round 1 discussion, begin Round 2 bookmark placement.

- Remind participants that bookmark placement is always an individual activity.
- Collect your participants’ Rating Forms as they complete them.
- Give your participants’ Rating Forms to the Group Leader.

4:00 PM Begin discussion of Round 2 as a large group

A member of the CTB Standard Setting Team presents a summary of the voting from each table to the entire group. Then, the Group Leader leads a discussion with the entire group about each bookmark, very similar to the table-level discussions after Round 1.

5:45 PM Secure materials collection

The Group Leader facilitates collection of the secure materials from all participants. A listing of secure materials to be collected is displayed in the room.

- Supervise the collection of secure materials at your tables. See the “Secure Materials” page in this agenda for more information.

6:00 PM Secure materials audit

The Group Leader asks the Table Leaders to audit the secure materials at one other table.

- Order materials numerically by packet number within each table.
- Verify that all signed-out packets are present.
- Stack materials at each table neatly into one pile with the table tent on top, under the top packet's rubber band.
- Place the separate stacks on one table. Do not combine tables' stacks.

6:15 PM Table Leader debriefing

Table Leaders discuss the events of the day and plans for the next day.

6:30 PM Table Leader dismissal

8:00 AM Continental breakfast

8:30 AM Complete discussion of Round 2 as a large group
The group completes discussion of the bookmarks set in Round 2.

10:00 AM Round 3 ratings
The Group Leader directs all participants to place their Round 3 bookmarks.

- Remind participants that bookmark placement is always an individual activity.
- Collect your participants' Rating Forms as they complete them.
- Give your participants' Rating Forms to the Group Leader.

10:30 AM Presentation of final recommendations
A member of the CTB Standard Setting Team presents the group with a summary of Round 3 voting.

10:45 AM Evaluations
Each participant completes an evaluation of the standard setting.

TABLE LEADERS ONLY

11:00 AM Cross-grade discussion for Table Leaders
After seeing the presentation of final recommendations and completing an evaluation, Table Leaders from all grade levels will gather together to discuss their groups' bookmarks and impact data. During these discussions, Table Leaders will discuss the knowledge, skills, and abilities they expect of students in each performance level.

- As a group, the Table Leaders will examine the bookmarks and impact data as a multi-grade system of performance standards. If needed, the group will make recommendations to adjust some bookmarks or keep them the same.
- When the cross-grade discussion is complete, Table Leaders return to their groups and join the descriptor writing.

11:00 AM Performance-level descriptors, first draft
The Group Leader presents instructions for writing a first draft of the long performance-level descriptors.

- Your group's descriptors should synthesize the knowledge, skills, and abilities necessary to respond successfully to each of the items assigned to each performance level.
- You will receive a listing of the items in the performance levels.

12:00 PM Lunch

- 1:00 PM** **Performance-level descriptors, second draft**
Each table presents its draft to the entire group and receives comments.
- 3:30 PM** **Performance-level descriptors, final draft**
Each group writes its final draft of the performance-level descriptors.
- 5:30 PM** **Secure materials collection**
The Group Leader facilitates collection of the secure materials from all participants. A listing of secure materials to be collected is displayed in the room.
- Supervise the collection of secure materials at your tables. See the “Secure Materials” page in this agenda for more information.
- 5:45 PM** **Secure materials audit**
The Group Leader asks the Table Leaders to audit the secure materials at one other table.
- Order materials numerically by packet number within each table.
 - Verify that all signed-out packets are present.
 - Stack materials at each table neatly into one pile with the table tent on top, under the top packet’s rubber band.
 - Place the separate stacks on one table. Do not combine tables’ stacks.
- 6:00 PM** **Dismissal**
The Arizona Department of Education and CTB/McGraw-Hill thank you for your time and participation!

Why do we do Secure Materials Collection?

A thorough collection of secure test materials protects both the reliability of the testing program and the substantial monetary investment in the assessment. A structured method of collection has been established to gather effectively all of the secure material at the workshop. Each day as you facilitate secure materials collection at your table, refer to this guide for instructions and suggestions.

During the collection, participants should place each secure item, one at a time, in a pile on the table in front of them. After the process, each participant will have a single stack of materials, each stacked in the same way as everyone else in the room. Please follow these steps to facilitate the process.

How do I do Secure Materials Collection?

1. Get the attention of all the participants at your table. Discourage any side conversations or inattention.
2. Using the list provided, call out each item, one at a time, and watch participants place that item on their stack. Discourage participants from moving ahead. Ensure that participants have placed the item in their stack before moving on.
3. Proceed through the list until each piece of secure material has been collected. Direct participants to place a rubber band around their stack when completed.
4. If any participants wish to leave additional items with their materials overnight, encourage them to place it beneath their stack, inside the rubber band.
5. Table Leaders will audit the secure materials at one other table.
6. Once you have supervised the collection of secure materials and are satisfied that all items have been collected, inform the Group Leader.
7. The collected materials are stored overnight and will be available in the morning.

What should I expect from Secure Materials Collection?

Generally, secure materials collection goes smoothly. If you have any questions about the collection process, or if you have a concern about test security at the standard setting workshop, please contact your Group Leader or a member of the CTB Standard Setting Team.

Section D

Table Leader Training Overheads

Table Leader Training

Arizona's Instrument to Measure Standards

Grades 3 – 8 and High School
Reading and Mathematics
May 2005

CTB/McGraw-Hill | QUALITY ASSESSMENT SINCE 1924

CTB Standard Setting Team

Research

- Karla Egan
- Rick Mercado
- Michaela Gelin
- Bruce Randel
- Mike Chia
- Dorothy Tele'a
- Adele Brandstrom
- Michelle Shaw

Program Management

- Cynthia Fischer
- Lindy Desmond
- Jessica Breznak

CTB
McGraw-Hill

McGraw-Hill Education

CTB Group Leaders

Reading

- Teresa Park, Grade 3
- Joshua Pierce, Grade 5
- Gale Weir, Grade 8
- Kellie Crain, High School

Writing

- Ellen Tucker, Grade 3
- Pat Stevens, Grade 5
- Lynn King, Grade 8
- Tom Maddox, High School

Mathematics

- Ric Garrido, Grade 3
- Darren Schmidt, Grade 5
- Dan Dube, Grade 8
- Mary Foster, High School

Manager Development

- Francine McKenty

CTB
McGraw-Hill

McGraw-Hill Education

What is standard setting?

- A process that lets experts make judgements about the content that the *Meets the Standard* student should know.
 - Also, *Approaches the Standard* and *Exceeds the Standard* students.

Why standard setting?

- Content standards define what students are tested on.
 - These are things students should be able to do.
 - Arizona has academic content standards in Reading and Mathematics.
- Performance standards define what students can do in each performance level.
 - You will actively discuss your expectations of students, the Target Students, in each performance level.

Performance Levels

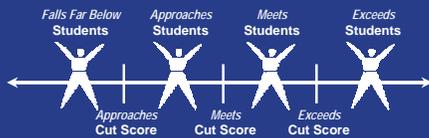
- Specify the knowledge, skills, and abilities a student needs to know in order to be classified as *Falls Far Below the Standard*, *Approaches the Standard*, *Meets the Standard*, or *Exceeds the Standard*.

How do we set our standards?

- Balance of Content and Percent Correct
 - Content
 - Uses pre-established content standards
 - Considers the educational objectives
 - Percent Correct
 - Holistic measure comparable to classroom judgment
- Bookmark Standard Setting Procedure

Purpose of Standard Setting

- Allows cut scores to be set on the test scale
- The test scale represents the ability of students



Purpose of Standard Setting

- You will set a cut score on the test scale.
- Students who meet or exceed the cut score will have enough knowledge, skills and abilities to be classified as *Meets the Standard* on the AIMS tests.
 - Also *Approaches the Standard* and *Exceeds the Standard*.
- Content decisions will be based on Arizona's academic content standards.

Bookmark Standard Setting

- Item-centered method
- Content-based decisions

Committee Roles

- Group Leaders
- Table Leaders
- Participants
- ADE
- CTB

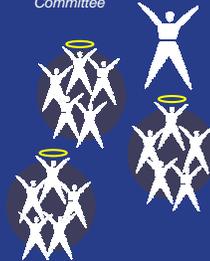
Standard Setting
Committee



Committee Roles

- Group Leader
 - Facilitator
 - Participants stay focused on task
 - Participants interact with their own group
 - Participants finish in a timely manner
 - Leads discussion
- Materials collection
 - Secure materials

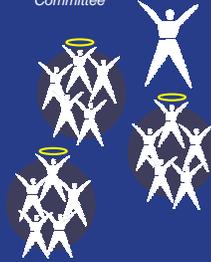
Standard Setting
Committee



Committee Roles

- Table Leaders
 - Lead discussion at the table
 - Standard setters
- Participants
 - Standard setters

Standard Setting Committee



Workshop Overview

- Round 1
 - Study test items
 - Make ratings
- Round 2
 - Discuss ratings in a small group
- Round 3
 - Discuss ratings in a large group
- Table Leader Discussions
- Description Writing

Ordered Item Booklets

- One item per page
- Easiest item first, hardest item last
- Items increase in difficulty

Ordered Item 1

1

1. Kitty is taking a trip on which she plans to drive 300 miles each day. Her trip is 1,723 miles long. She has already driven 849 miles. How much farther must she drive?
- A. 574 miles
 - B. 874 miles
 - C. 1,423 miles
 - D. 2,872 miles

Ordered Item 2

2

CARTONS OF EGGS SOLD LAST MONTH
Farm A ○ ○ ○ ○
Farm B ○ ○ ○ ○ ○ ○
Farm C ○ ○ ○
Each ○ = 100 Cartons

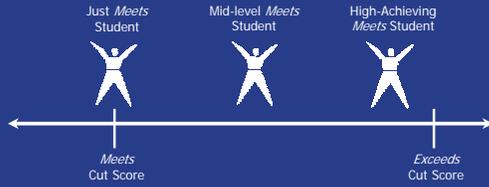
4. According to the graph how many cartons of eggs were sold altogether by farms A, B, and C last month?
- A. 13
 - B. 130
 - C. 1,300
 - D. 13,000

Mock Standard Setting

- 2 Performance Levels
 - Meets
 - Approaches
- 9-item test
 - Grade 4 Mathematics

Target Student

- We want to describe the skills held in common by all these students
 - These are the skills of the *Just Meets* student

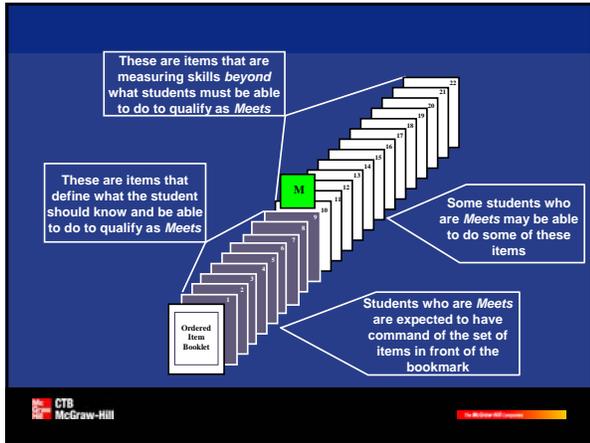


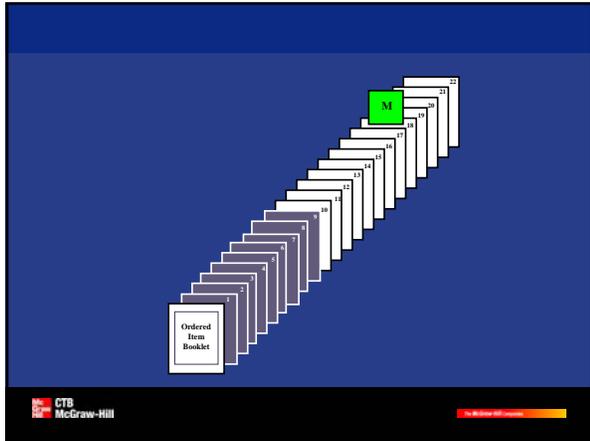
Bookmark Placement

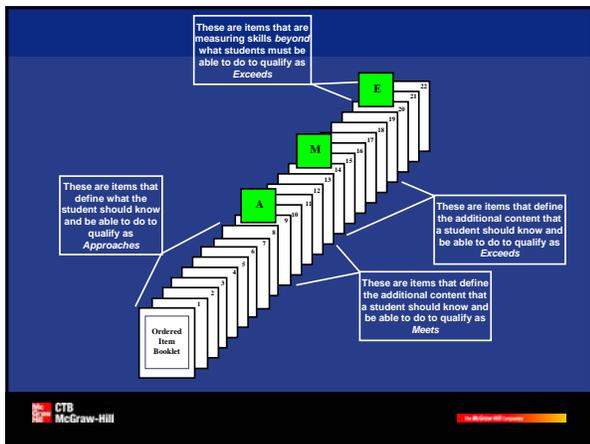
- Items preceding the Bookmark reflect content that all *Meets* students should have command of
 - This means that the *Meets* students should most likely know the correct responses

Bookmark Placement

- Place the *Meets* bookmark at the first point where you feel that a student who has command of the content reflected by the items before the bookmark has demonstrated sufficient skills to infer that the student should be classified as *Meets the Standard*.







Sample Results

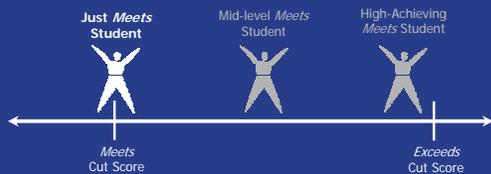
	<i>App.</i> Bookmark	<i>Meets</i> Bookmark	<i>Exceeds</i> Bookmark
Table 1	15	34	86
Table 2	11	37	82
Table 3	14	34	81
Median	13	34	82

Impact Data: Estimated percent of students in each performance level based on the current Large Group median

FFB	<i>App.</i>	<i>Meets</i>	<i>Exceeds</i>
0%	0%	0%	0%

Target Student Discussion

- The student who has just made it into a performance level
 - Just *Approaches*, Just *Meets*, and Just *Exceeds* students
- Refer to Arizona's academic content standards



Agenda

- Opening Session
- Take the test
 - Individual Activity
- Discuss the Target Students
 - Group Activity
- Study the Ordered Item Booklet
 - Table Activity

Agenda (cont.)

- Make Round 1 bookmark placements
 - Individual Activity
- Round 2
 - Review Round 1 results in tables
 - Discuss in tables
 - Make new judgments individually

Agenda (cont.)

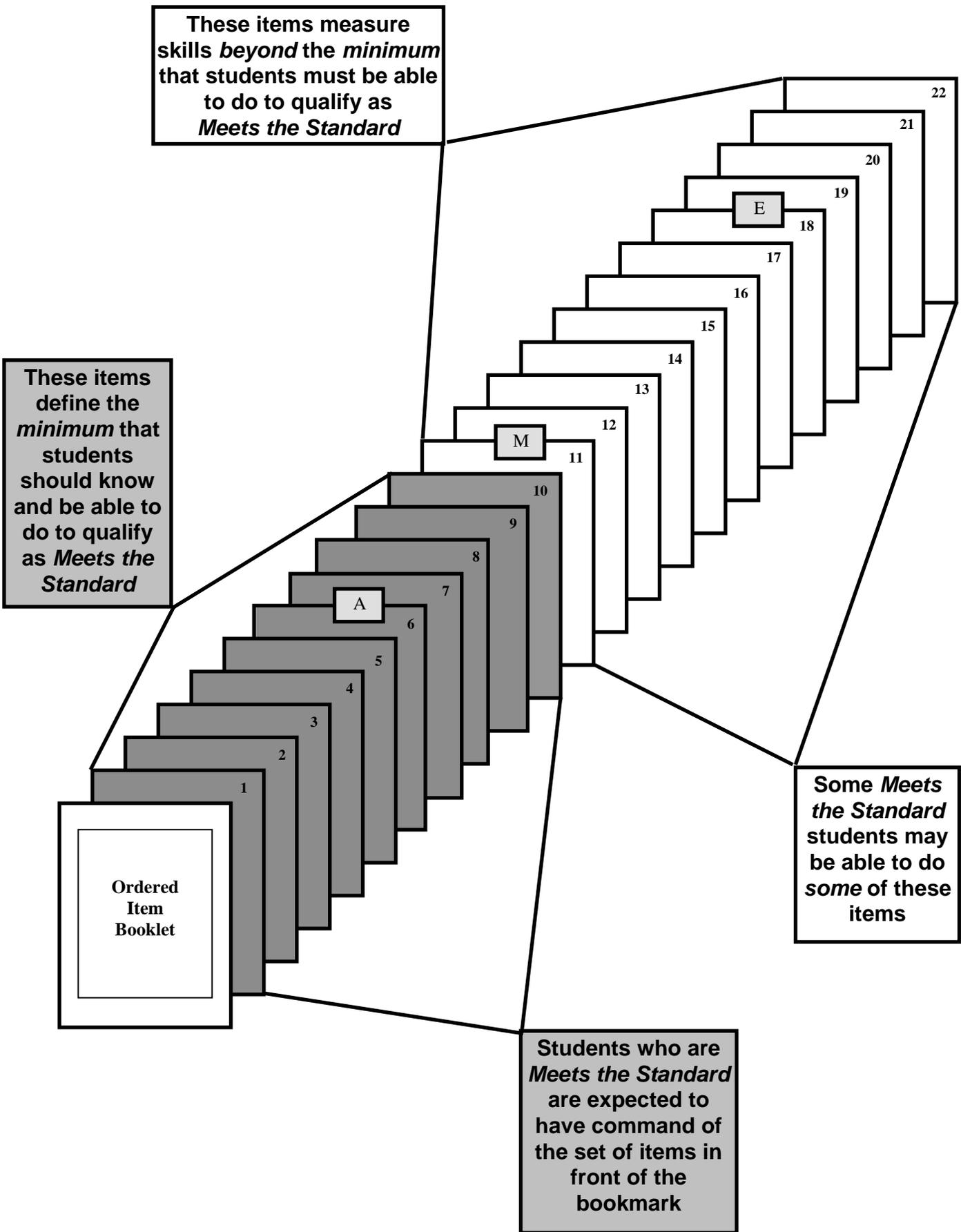
- Round 3
 - Review Round 2 results as a large group
 - Discuss as a large group
 - Make new judgments individually
- Review final results
- Evaluate the Standard Setting
- Table Leader Discussions
- Descriptor Writing

Questions?

- Thank you for your participation!

Section E

Participant Training Materials



Bookmark Placement

These directions are written for placing the *Meets the Standard* bookmark and apply analogously to the *Exceeds the Standard* and the *Approaches the Standard* bookmarks.

For whom am I placing this bookmark? The Target Student

When you place your *Meets the Standard* bookmark, you are separating the highest ability *Approaches the Standard* students from the lowest ability *Meets the Standard* students. In other words, you are keeping in mind the Target Student who will just make it into the *Meets the Standard* level.

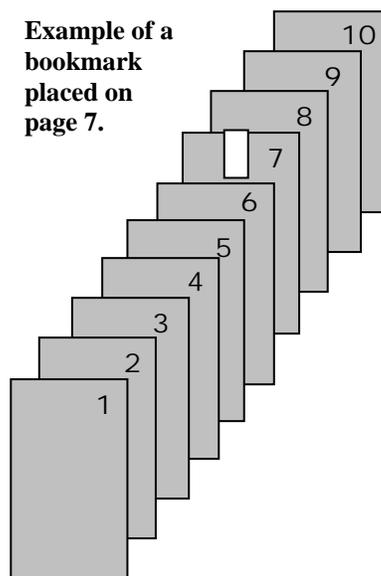
How do I place my bookmark? The Mechanics

The bookmark is exactly that: a bookmark. It separates the content students are expected to have command of from the content they are *not* expected to have command of. In the example below, a participant has placed the *Meets the Standard* bookmark on page 7. With this bookmark placement, the participant says that a student must have command of the content represented by items 1 through 6 to be classified as *Meets the Standard*.

To place your bookmark, start at page 1 in the Ordered Item Booklet (OIB). Page through the OIB **looking at the content covered** until you find the *first* page where you think a student has demonstrated a sufficient body of evidence to indicate that the student *Meets the Standard* relative to the content standards. This is the content you are saying a *Meets the Standard* Target Student needs to have command of to just make it into the *Meets* level.

Hold the pages that contain the content you expect the student to have command of in your left hand. Place your bookmark on the page **AFTER** the last item you expect the student to have command of. This page number is your bookmark. Write it on your Rating Form.

Hint: It may be helpful to first identify the interval of items in which you are reasonably certain the bookmark should be placed; then you can place the bookmark within that interval. If you are uncertain about where to place your bookmark, make your best decision; you will have two more rounds of voting to reconsider your bookmark.



What does my *Meets the Standard* bookmark mean? Some Answers

- You expect *Meets the Standard* students to have command of the knowledge, skills, and abilities contained in the items **before** your bookmark.
- *Meets the Standard* students should know and be able to do the items **before** the bookmark. For multiple-choice items, *Meets the Standard* students should know the correct response.

Is my bookmark the same as a raw score? Yes

Your bookmark placement is equivalent to a raw score. In the example above, the *Meets the Standard* bookmark was placed on page 7. The participant was saying that a student must get 6 items of 10 correct to be classified as *Meets the Standard*. This participant is also saying that a barely *Meets the Standard* student must have command of the content measured by the items on pages 1 through 6.

Frequently Asked Questions about Bookmark Placement

These questions are written in reference to the *Meets the Standard* bookmark and apply analogously to the *Exceeds the Standard* and the *Approaches the Standard* bookmarks.

How do I know if I placed my bookmark in the “right” place?

The “right” place is a matter of judgment, *your* judgment. You are placing your bookmark based on the content you expect students to know and be able to do.

What is a *p*-value?

A *p*-value is an indication of item difficulty. It is defined as the proportion of students who answer an item correctly. For example, a *p*-value of .57 means that 57% of students answered the item correctly. In Arizona, *p*-values are calculated from actual student performance on the Spring 2005 administration of the AIMS tests.

How are *p*-values used in the Bookmark Standard Setting Procedure?

In a Bookmark Standard Setting, *p*-values are used to order the items in terms of difficulty. Items with higher *p*-values are easier than items with lower *p*-values.

I set my bookmark based on the content I expect students to know and be able to do, that is, the content I expect students to have command of. What is the definition of *command*?

Items in the Ordered Item Booklet are arranged from easiest to hardest in terms of their *p*-values. We expect that students will do better on easier items, and will do less well on harder items. Keeping this in mind, we consider students to have demonstrated command of items if they are more likely than not to answer the items correctly. By placing your *Meets* bookmark, you are saying that *Meets* students have command of the items before the bookmark and are likely to answer these items correctly. Conversely, *Meets* students are less likely to answer the items after the bookmark correctly.

If a student misses some items before the *Meets the Standard* bookmark and gets some correct after the bookmark, is that student still classified as *Meets the Standard*?

A student does *not* have to get every item before the bookmark correct to be classified as *Meets*. *Meets* students can miss some items *before* the bookmark and correctly respond to some items *after* the bookmark.

Does the page number on which I place my bookmark correspond to the raw score a student must get on the test?

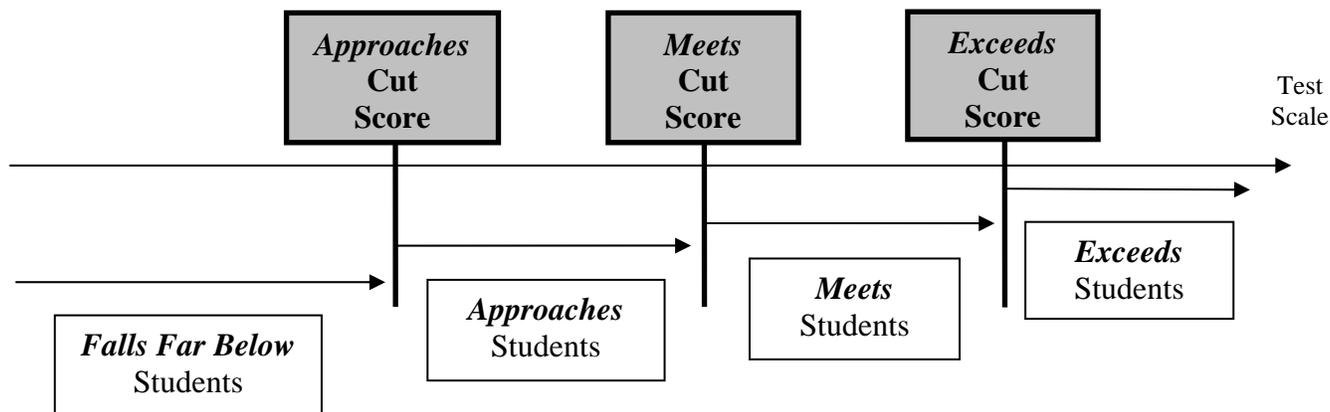
Yes. Each item in the Ordered Item Booklet is analogous to one raw score point. If you place your bookmark on page 50, then you have indicated that you expect a raw score of 49. Keep in mind that you should balance content expectations with your expectations of a raw score or percent correct.

Should I place my bookmark in the first place in the Ordered Item Booklet where all the content standards have occurred?

Not necessarily. The test only samples the content domain. In some cases, some content standards will only be represented by difficult items that would be hard for most students to have command of.

How many bookmarks do I set?

You set one less bookmark than the number of performance levels. For Arizona's Instrument to Measure Standards tests, you will set three bookmarks to separate students into four performance levels.



Bookmark Training

Arizona's Instrument to Measure Standards

Grades 3 – 8 and High School
Reading and Mathematics
May 2005

CTB/McGraw-Hill QUALITY ASSESSMENT SINCE 1924

Target Student

- We want to describe the skills held in common by all these students.
 - These are the skills of the Just *Meets* student.



CTB McGraw-Hill



Bookmark Placement

- Items preceding the Bookmark reflect content that all *Meets* students should have command of.
 - This means that the *Meets* students should most likely know the correct responses.

CTB McGraw-Hill

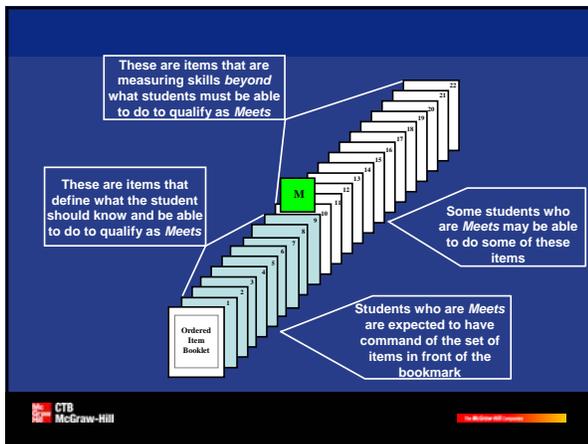


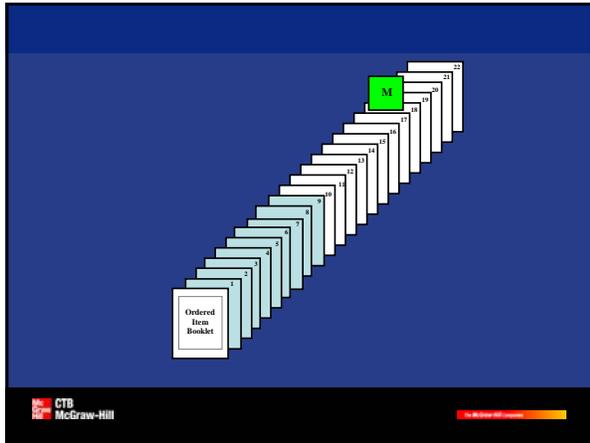
Bookmark Placement

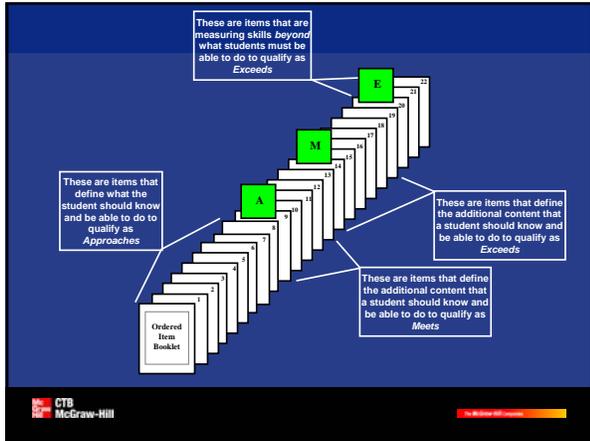
- The Bookmark is analogous to a raw score or percent correct.
 - Raw Score = Bookmark - 1.
 - Percent Correct = (Bookmark - 1) / (Possible Score)
- You should balance your expectations of content with your expectations of percent correct.

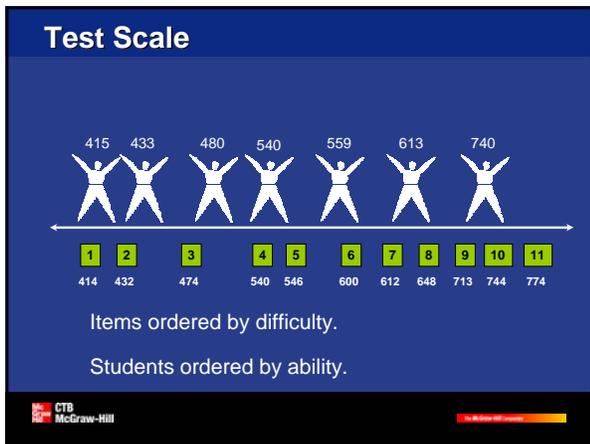
Bookmark Placement

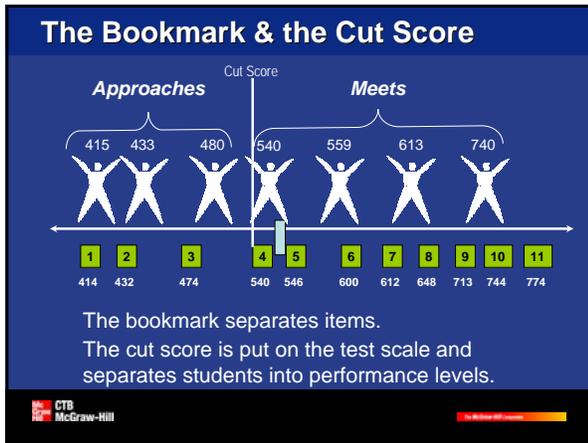
- Place the *Meets* bookmark at the first point where you feel that a student who has command of the content reflected by the items before the bookmark has demonstrated sufficient skills to infer that the student should be classified as *Meets the Standard*.







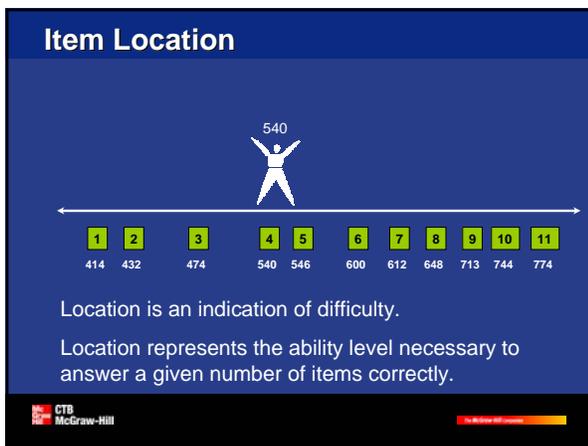




Command

- Students show command when they are more likely than not to answer an item correctly.
 - If students show command on a given number of items on the test, we assume its on the easiest items.

CTB McGraw-Hill



SAMPLE Mathematics Item Map

Print Name: _____ Group Number: _____

Order of difficulty (easy to hard)	p-value	Location	Form	Item No.	Score Key	Content Strand *	What does this item measure? That is, what do you know about a student who can respond successfully to this item?	Why is this item more difficult than the preceding items?
1	0.91	220	12	1	B	1		N/A
2	0.87	225	9	4	C	4		
3	0.75	229	9	3	B	5		
4	0.71	240	12	2	D	1		
5	0.62	241	12	4	B	4		
6	0.59	262	9	5	A	1		
7	0.43	303	9	6	B	2		
8	0.39	321	9	8	B	2		
9	0.18	401	9	9	C	4		

* 1 = Number Sense, Properties, & Operations; 2 = Measurement; 3 = Geometry; 4 = Data Analysis, Statistics, & Probability; 5 = Algebra & Functions

SAMPLE ORDERED ITEM BOOKLET

SAMPLE

Standard Setting Workshop

Grade 4

Mathematics

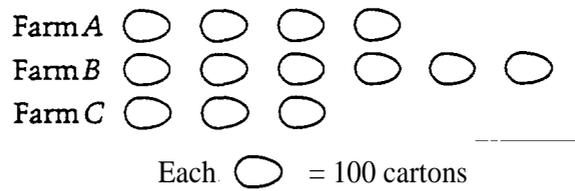
Ordered Item Booklet

**Publicly released items from the National Assessment of Educational
Progress 1996 State Assessment Program in Mathematics.**

**The Bookmark Standard Setting Procedure ©
Copyright 1999 by CTB/McGraw-Hill.**

1. Kitty is taking a trip on which she plans to drive 300 miles each day. Her trip is 1,723 miles long. She has already driven 849 miles. How much farther must she drive?
- Ⓐ 574 miles
 - Ⓑ 874 miles
 - Ⓒ 1,423 miles
 - Ⓓ 2,872 miles

CARTONS OF EGGS SOLD LAST MONTH



4. According to the graph, how many cartons of eggs were sold altogether by farms A, B, and C last month?
- A 13
 - B 130
 - C 1,300
 - D 3,000

3. N stands for the number of stamps John had. He gave 12 stamps to his sister. Which expression tells how many stamps John has now?

A $N+12$

B $N-12$

C $12- N$

D $12 \times N$

2. A whole number is multiplied by 5. Which of these could be the result?

A 652

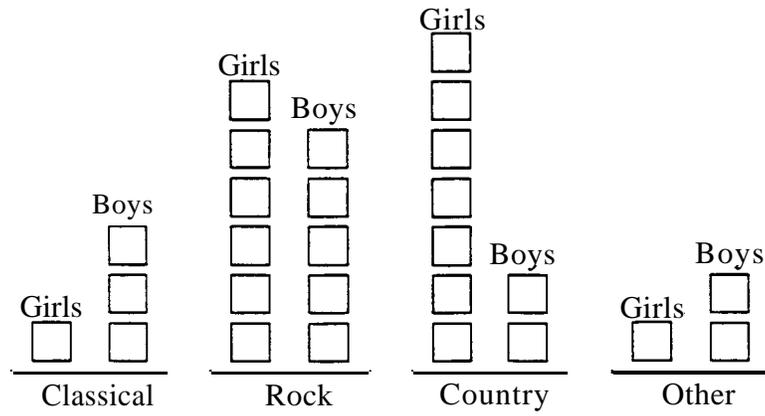
B 562

C 526

D 265

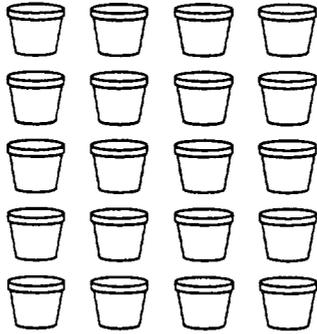
4. Each boy and girl in the class voted for his or her favorite kind of music.
Here are the results.

☐ = 1 student



Which kind of music did most students in the class prefer?

- Ⓐ Classical
- Ⓑ Rock
- Ⓒ Country
- Ⓓ Other



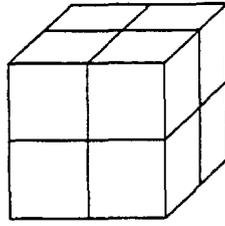
5. The picture shows the flowerpots in which Kevin will plant flower seeds. He needs 3 seeds for each pot. Which of the following number sentences shows how many seeds Kevin will need for all of the pots?

A $5 \times 4 \times 3 = \square$

B $(5 \times 4) + 3 = \square$

C $(5 + 4) \times 3 = \square$

D $5 + 4 + 3 = \square$



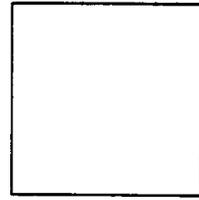
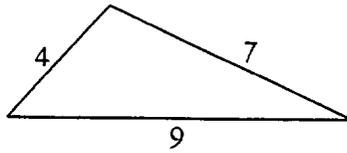
6. In this figure, how many small cubes were put together to form the large cube?

A 7

B 8

C 12

D 24



8. If both the square and the triangle above have the same perimeter, what is the length of each side of the square?

- Ⓐ 4
- Ⓑ 5
- Ⓒ 6
- Ⓓ 7

9. There are 3 fifth graders and 2 sixth graders on the swim team. Everyone's name is put in a hat and the captain is chosen by picking one name. What are the chances that the captain will be a fifth grader?

- Ⓐ 1 out of 5
- Ⓑ 1 out of 3
- Ⓒ 3 out of 5
- Ⓓ 2 out of 3

Q000709

9. There are 3 fifth graders and 2 sixth graders on the swim team. Everyone's name is put in a hat and the captain is chosen by picking one name. What are the chances that the captain will be a fifth grader?

A 1 out of 5

B 1 out of 3

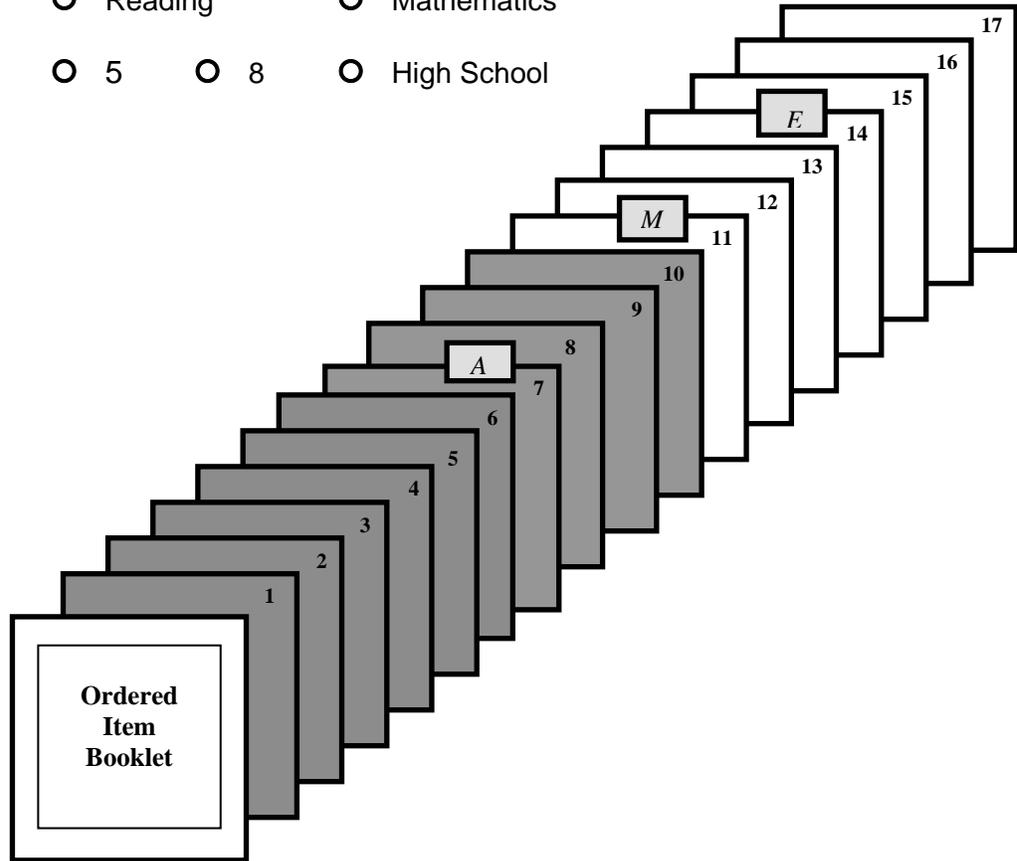
C 3 out of 5

D 2 out of 3

Content Area: Reading Mathematics

Grade: 3 5 8 High School

Arizona May 2005



Suppose the bookmarks were placed in this sample ordered item booklet as follows:

	<i>Approaches</i> Bookmark on Page #	<i>Meets</i> Bookmark on Page #	<i>Exceeds</i> Bookmark on Page #
Round 1	7	11	14

- Which items does a student need to have command of to just make it into the *Meets* performance level?
 1 to 6 1 to 7 1 to 10 1 to 11
- If a student has command of only items 1 through 9, in which performance level would this student be?
 Falls Far Below *Approaches* *Meets* *Exceeds*
- Suppose a student has command of items 1 through 10. Which performance level is this student in?
 Falls Far Below *Approaches* *Meets* *Exceeds*
- Will the items BEFORE the *Meets* bookmark be more or less difficult to answer than the items AFTER the bookmark or about the same?
 More difficult to answer About the same Less difficult to answer

Arizona May 2005 Bookmark Standard Setting Check Set Results

Count Correct		
Item	Reading (N=41)	Mathematics (N=45)
1	38	43
2	33	42
3	38	39
4	39	45

Percent Correct		
Item	Reading (N=41)	Mathematics (N=45)
1	93%	96%
2	80%	93%
3	93%	87%
4	95%	100%

Section F

Participant Evaluation of the AIMS Bookmark Standard Setting

Arizona Bookmark Standard Setting Evaluation -- May 2005

Key: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree	SD	D	N	A	SA
1. The Bookmark Standard Setting procedure was well described.	<input type="radio"/>				
2. The goals of this procedure were clear.	<input type="radio"/>				
3. I felt that this procedure was fair.	<input type="radio"/>				
4. Participating in the Standard Setting increased my understanding of the test.	<input type="radio"/>				
5. The conference was well organized.	<input type="radio"/>				
6. The training materials were helpful.	<input type="radio"/>				
7. The training on Bookmark placement made the task clear to me.	<input type="radio"/>				
8. During Round 1, I placed my bookmark without consulting other participants.	<input type="radio"/>				
9. I considered the content standards when I placed my bookmark.	<input type="radio"/>				
10. I understood how to place my bookmark.	<input type="radio"/>				
11. I had enough time to consider my Round 1 bookmark.	<input type="radio"/>				
12. I understood how to do Bookmark placement from the beginning, so my earlier bookmarks are comparable to my later bookmarks.	<input type="radio"/>				
13. Overall, I was satisfied with my group's final bookmark.	<input type="radio"/>				
14. I would defend the Approaches cut score against criticism that it is too high.	<input type="radio"/>				
15. I would defend the Approaches cut score against criticism that it is too low.	<input type="radio"/>				
16. I would defend the Meets cut score against criticism that it is too high.	<input type="radio"/>				
17. I would defend the Meets cut score against criticism that it is too low.	<input type="radio"/>				
18. I would defend the Exceeds cut score against criticism that it is too high.	<input type="radio"/>				
19. I would defend the Exceeds cut score against criticism that it is too low.	<input type="radio"/>				
20. Overall, I believe that my opinions were considered and valued by my group.	<input type="radio"/>				
21. I am confident that the Bookmark Procedure produced valid standards.	<input type="radio"/>				
22. The ordering of the items in the ordered item booklet agreed with my perception of the relative difficulty of the items.	<input type="radio"/>				
23. Overall, my table's discussions were open and honest.	<input type="radio"/>				
24. The presentation of impact data was helpful to me.	<input type="radio"/>				
25. Overall, I valued the workshop as a professional development experience.	<input type="radio"/>				
26. This experience will help me target instruction for the students in my classroom.	<input type="radio"/>				

27. Which content area did you work on during this standard setting?

Mathematics Reading

28. Which grade did you work on during this standard setting?

Grade 3 Grade 5
 Grade 8 High School

29. What is your occupation?

Teacher Administrator Other

30. How many years in your current profession?

1-5 6-10 11-15 16-20 21+

31. What is your education level?

Bachelor's Master's Doctorate

32. What is your gender?

Male Female

33. What is your racial/ethnic background?

Asian/Pacific Islander African American
 American Indian Hispanic
 White Other

34. Have you taught Special Education?

Yes No

35. Have you taught ESL/ELL?

Yes No

36. Have you taught Vocational Education?

Yes No

37. Have you taught Alternative Education?

Yes No

38. Have you taught Adult Education?

Yes No

On the back of this evaluation, please add your comments. Thank You!

Arizona
Bookmark Standard Setting May 2005
Evaluation Results

About these results

Each question is shown, along with its answer choices and associated response percentages. For Likert-type questions, there are five possible responses: "Strongly Disagree," "Disagree," "Neutral," "Agree," and "Strongly Agree." For each question, the number of respondents is shown in the column labeled "N."

Question 1

The Bookmark Standard Setting procedure was well described.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	0.0%	2.2%	43.8%	53.9%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 5	11	0.0%	0.0%	0.0%	54.5%	45.5%
	Grade 8	11	0.0%	0.0%	9.1%	27.3%	63.6%
	High School	12	0.0%	0.0%	0.0%	41.7%	58.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	33.3%	66.7%
	Grade 5	11	0.0%	0.0%	9.1%	54.5%	36.4%
	Grade 8	11	0.0%	0.0%	0.0%	45.5%	54.5%
	High School	10	0.0%	0.0%	0.0%	50.0%	50.0%

Question 2

The goals of this procedure were clear.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	1.1%	6.7%	31.5%	60.7%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 5	11	0.0%	0.0%	0.0%	63.6%	36.4%
	Grade 8	11	0.0%	0.0%	0.0%	18.2%	81.8%
	High School	12	0.0%	0.0%	0.0%	33.3%	66.7%
Reading	Grade 3	12	0.0%	0.0%	8.3%	16.7%	75.0%
	Grade 5	11	0.0%	9.1%	18.2%	36.4%	36.4%
	Grade 8	11	0.0%	0.0%	9.1%	18.2%	72.7%
	High School	10	0.0%	0.0%	20.0%	30.0%	50.0%

Question 3

I felt that this procedure was fair.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	1.1%	4.5%	16.9%	77.5%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 5	11	0.0%	0.0%	0.0%	18.2%	81.8%
	Grade 8	11	0.0%	0.0%	0.0%	9.1%	90.9%
	High School	12	0.0%	0.0%	16.7%	25.0%	58.3%
Reading	Grade 3	12	0.0%	0.0%	8.3%	8.3%	83.3%
	Grade 5	11	0.0%	9.1%	0.0%	9.1%	81.8%
	Grade 8	11	0.0%	0.0%	0.0%	9.1%	90.9%
	High School	10	0.0%	0.0%	10.0%	20.0%	70.0%

Question 4

Participating in the Standard Setting increased my understanding of the test.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	1.1%	1.1%	2.3%	22.7%	72.7%
Mathematics	Grade 3	11	0.0%	0.0%	18.2%	9.1%	72.7%
	Grade 5	11	0.0%	9.1%	0.0%	36.4%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	11	0.0%	0.0%	0.0%	27.3%	72.7%
Reading	Grade 3	12	0.0%	0.0%	0.0%	16.7%	83.3%
	Grade 5	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 8	11	0.0%	0.0%	0.0%	18.2%	81.8%
	High School	10	10.0%	0.0%	0.0%	0.0%	90.0%

Question 5

The conference was well organized.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	1.1%	6.7%	39.3%	52.8%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 5	11	0.0%	0.0%	0.0%	54.5%	45.5%
	Grade 8	11	0.0%	0.0%	9.1%	27.3%	63.6%
	High School	12	0.0%	8.3%	16.7%	33.3%	41.7%
Reading	Grade 3	12	0.0%	0.0%	0.0%	41.7%	58.3%
	Grade 5	11	0.0%	0.0%	18.2%	45.5%	36.4%
	Grade 8	11	0.0%	0.0%	0.0%	45.5%	54.5%
	High School	10	0.0%	0.0%	10.0%	30.0%	60.0%

Question 6

The training materials were helpful.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	2.2%	6.7%	36.0%	55.1%
Mathematics	Grade 3	11	0.0%	9.1%	0.0%	45.5%	45.5%
	Grade 5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	12	0.0%	8.3%	8.3%	50.0%	33.3%
Reading	Grade 3	12	0.0%	0.0%	8.3%	16.7%	75.0%
	Grade 5	11	0.0%	0.0%	27.3%	36.4%	36.4%
	Grade 8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	10	0.0%	0.0%	10.0%	20.0%	70.0%

Question 7

The training on Bookmark placement made the task clear to me.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	1.1%	3.4%	34.8%	60.7%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	54.5%	45.5%
	Grade 5	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 8	11	0.0%	0.0%	9.1%	9.1%	81.8%
	High School	12	0.0%	8.3%	0.0%	33.3%	58.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	0.0%	0.0%	0.0%	63.6%	36.4%
	Grade 8	11	0.0%	0.0%	9.1%	27.3%	63.6%
	High School	10	0.0%	0.0%	10.0%	30.0%	60.0%

Question 8

During Round 1, I placed my bookmark without consulting other participants.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	2.2%	0.0%	3.4%	21.3%	73.0%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 5	11	0.0%	0.0%	0.0%	9.1%	90.9%
	Grade 8	11	0.0%	0.0%	18.2%	0.0%	81.8%
	High School	12	8.3%	0.0%	0.0%	41.7%	50.0%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	9.1%	0.0%	9.1%	27.3%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	10	0.0%	0.0%	0.0%	10.0%	90.0%

Question 9

I considered the content standards when I placed my bookmark.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	0.0%	3.4%	25.8%	70.8%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 5	11	0.0%	0.0%	0.0%	9.1%	90.9%
	Grade 8	11	0.0%	0.0%	9.1%	45.5%	45.5%
	High School	12	0.0%	0.0%	0.0%	41.7%	58.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	0.0%	0.0%	18.2%	9.1%	72.7%
	Grade 8	11	0.0%	0.0%	0.0%	18.2%	81.8%
	High School	10	0.0%	0.0%	0.0%	30.0%	70.0%

Question 10

I understood how to place my bookmark.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	1.1%	1.1%	36.0%	61.8%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	12	0.0%	0.0%	0.0%	41.7%	58.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	41.7%	58.3%
	Grade 5	11	0.0%	9.1%	9.1%	36.4%	45.5%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	10	0.0%	0.0%	0.0%	20.0%	80.0%

Question 11

I had enough time to consider my Round 1 bookmark.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	1.1%	3.4%	2.2%	25.8%	67.4%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 5	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 8	11	0.0%	18.2%	0.0%	9.1%	72.7%
	High School	12	0.0%	0.0%	8.3%	25.0%	66.7%
Reading	Grade 3	12	0.0%	8.3%	0.0%	16.7%	75.0%
	Grade 5	11	9.1%	0.0%	9.1%	27.3%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	10	0.0%	0.0%	0.0%	30.0%	70.0%

Question 12

I understood how to do Bookmark placement from the beginning, so my earlier bookmarks are comparable to my later bookmarks.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	3.4%	6.8%	9.1%	37.5%	43.2%
Mathematics	Grade 3	10	0.0%	0.0%	10.0%	50.0%	40.0%
	Grade 5	11	0.0%	0.0%	18.2%	36.4%	45.5%
	Grade 8	11	0.0%	18.2%	27.3%	18.2%	36.4%
	High School	12	0.0%	0.0%	0.0%	41.7%	58.3%
Reading	Grade 3	12	0.0%	8.3%	0.0%	41.7%	50.0%
	Grade 5	11	27.3%	27.3%	0.0%	27.3%	18.2%
	Grade 8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	10	0.0%	0.0%	20.0%	50.0%	30.0%

Question 13

Overall, I was satisfied with my group's final bookmark.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	1.1%	2.2%	1.1%	31.5%	64.0%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	18.2%	81.8%
	Grade 5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	12	0.0%	0.0%	0.0%	0.0%	100.0%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	9.1%	9.1%	9.1%	27.3%	45.5%
	Grade 8	11	0.0%	0.0%	0.0%	63.6%	36.4%
	High School	10	0.0%	10.0%	0.0%	50.0%	40.0%

Question 14

I would defend the Approaches cut score against criticism that it is too high.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		87	0.0%	2.3%	4.6%	24.1%	69.0%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 8	11	0.0%	18.2%	0.0%	27.3%	54.5%
	High School	12	0.0%	0.0%	0.0%	16.7%	83.3%
Reading	Grade 3	11	0.0%	0.0%	0.0%	9.1%	90.9%
	Grade 5	11	0.0%	0.0%	27.3%	9.1%	63.6%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	9	0.0%	0.0%	11.1%	33.3%	55.6%

Question 15

I would defend the Approaches cut score against criticism that it is too low.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	0.0%	4.5%	5.7%	33.0%	56.8%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 5	11	0.0%	0.0%	0.0%	54.5%	45.5%
	Grade 8	11	0.0%	9.1%	9.1%	45.5%	36.4%
	High School	12	0.0%	0.0%	8.3%	16.7%	75.0%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	0.0%	9.1%	18.2%	18.2%	54.5%
	Grade 8	11	0.0%	18.2%	9.1%	27.3%	45.5%
	High School	9	0.0%	0.0%	0.0%	55.6%	44.4%

Question 16

I would defend the Meets cut score against criticism that it is too high.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	1.1%	2.3%	3.4%	25.0%	68.2%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 5	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 8	11	0.0%	9.1%	9.1%	9.1%	72.7%
	High School	12	0.0%	0.0%	0.0%	25.0%	75.0%
Reading	Grade 3	12	0.0%	0.0%	0.0%	16.7%	83.3%
	Grade 5	11	9.1%	9.1%	9.1%	27.3%	45.5%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	9	0.0%	0.0%	11.1%	33.3%	55.6%

Question 17

I would defend the Meets cut score against criticism that it is too low.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	1.1%	3.4%	3.4%	30.7%	61.4%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 8	11	0.0%	18.2%	0.0%	36.4%	45.5%
	High School	12	0.0%	0.0%	0.0%	16.7%	83.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	16.7%	83.3%
	Grade 5	11	9.1%	0.0%	18.2%	18.2%	54.5%
	Grade 8	11	0.0%	9.1%	0.0%	27.3%	63.6%
	High School	9	0.0%	0.0%	11.1%	44.4%	44.4%

Question 18

I would defend the Exceeds cut score against criticism that it is too high.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	0.0%	4.5%	2.3%	26.1%	67.0%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 5	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 8	11	0.0%	18.2%	0.0%	27.3%	54.5%
	High School	12	0.0%	0.0%	0.0%	16.7%	83.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	8.3%	91.7%
	Grade 5	11	0.0%	18.2%	9.1%	27.3%	45.5%
	Grade 8	11	0.0%	0.0%	0.0%	18.2%	81.8%
	High School	9	0.0%	0.0%	11.1%	33.3%	55.6%

Question 19

I would defend the Exceeds cut score against criticism that it is too low.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		87	0.0%	4.6%	3.4%	31.0%	60.9%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	45.5%	54.5%
	Grade 5	10	0.0%	0.0%	0.0%	40.0%	60.0%
	Grade 8	11	0.0%	18.2%	0.0%	36.4%	45.5%
	High School	12	0.0%	0.0%	0.0%	33.3%	66.7%
Reading	Grade 3	12	0.0%	0.0%	0.0%	16.7%	83.3%
	Grade 5	11	0.0%	9.1%	27.3%	9.1%	54.5%
	Grade 8	11	0.0%	9.1%	0.0%	18.2%	72.7%
	High School	9	0.0%	0.0%	0.0%	55.6%	44.4%

Question 20

Overall, I believe that my opinions were considered and valued by my group.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	0.0%	1.1%	2.3%	29.5%	67.0%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	54.5%	45.5%
	Grade 5	10	0.0%	0.0%	0.0%	40.0%	60.0%
	Grade 8	11	0.0%	9.1%	0.0%	18.2%	72.7%
	High School	12	0.0%	0.0%	0.0%	8.3%	91.7%
Reading	Grade 3	12	0.0%	0.0%	0.0%	16.7%	83.3%
	Grade 5	11	0.0%	0.0%	18.2%	27.3%	54.5%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	10	0.0%	0.0%	0.0%	50.0%	50.0%

Question 21

I am confident that the Bookmark Procedure produced valid standards.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		85	0.0%	0.0%	7.1%	44.7%	48.2%
Mathematics	Grade 3	10	0.0%	0.0%	10.0%	50.0%	40.0%
	Grade 5	10	0.0%	0.0%	0.0%	70.0%	30.0%
	Grade 8	11	0.0%	0.0%	0.0%	36.4%	63.6%
	High School	12	0.0%	0.0%	8.3%	33.3%	58.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	10	0.0%	0.0%	20.0%	50.0%	30.0%
	Grade 8	11	0.0%	0.0%	0.0%	54.5%	45.5%
	High School	9	0.0%	0.0%	22.2%	44.4%	33.3%

Question 22

The ordering of the items in the ordered item booklet agreed with my perception of the relative difficulty of the items.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	27.0%	14.6%	42.7%	15.7%
Mathematics	Grade 3	11	0.0%	0.0%	18.2%	63.6%	18.2%
	Grade 5	11	0.0%	63.6%	0.0%	27.3%	9.1%
	Grade 8	11	0.0%	18.2%	27.3%	36.4%	18.2%
	High School	12	0.0%	25.0%	25.0%	33.3%	16.7%
Reading	Grade 3	12	0.0%	58.3%	8.3%	16.7%	16.7%
	Grade 5	11	0.0%	9.1%	27.3%	63.6%	0.0%
	Grade 8	11	0.0%	9.1%	0.0%	63.6%	27.3%

	High School	10	0.0%	30.0%	10.0%	40.0%	20.0%
--	-------------	----	------	-------	-------	-------	-------

Question 23

Overall, my table's discussions were open and honest.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		87	0.0%	0.0%	3.4%	27.6%	69.0%
Mathematics	Grade 3	10	0.0%	0.0%	0.0%	40.0%	60.0%
	Grade 5	10	0.0%	0.0%	0.0%	50.0%	50.0%
	Grade 8	11	0.0%	0.0%	0.0%	27.3%	72.7%
	High School	12	0.0%	0.0%	0.0%	16.7%	83.3%
Reading	Grade 3	12	0.0%	0.0%	16.7%	16.7%	66.7%
	Grade 5	11	0.0%	0.0%	9.1%	27.3%	63.6%
	Grade 8	11	0.0%	0.0%	0.0%	9.1%	90.9%
	High School	10	0.0%	0.0%	0.0%	40.0%	60.0%

Question 24

The presentation of impact data was helpful to me.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	0.0%	2.2%	27.0%	70.8%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	36.4%	63.6%
	Grade 5	11	0.0%	0.0%	9.1%	45.5%	45.5%
	Grade 8	11	0.0%	0.0%	0.0%	9.1%	90.9%
	High School	12	0.0%	0.0%	0.0%	16.7%	83.3%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	0.0%	0.0%	0.0%	27.3%	72.7%
	Grade 8	11	0.0%	0.0%	9.1%	27.3%	63.6%
	High School	10	0.0%	0.0%	0.0%	30.0%	70.0%

Question 25

Overall, I valued the workshop as a professional development experience.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		89	0.0%	0.0%	1.1%	13.5%	85.4%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%	18.2%	81.8%
	Grade 5	11	0.0%	0.0%	0.0%	9.1%	90.9%
	Grade 8	11	0.0%	0.0%	9.1%	0.0%	90.9%
	High School	12	0.0%	0.0%	0.0%	0.0%	100.0%
Reading	Grade 3	12	0.0%	0.0%	0.0%	25.0%	75.0%
	Grade 5	11	0.0%	0.0%	0.0%	9.1%	90.9%
	Grade 8	11	0.0%	0.0%	0.0%	18.2%	81.8%
	High School	10	0.0%	0.0%	0.0%	30.0%	70.0%

Question 26

This experience will help me target instruction for the students in my classroom.

Content Area	Grade Level	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall		88	0.0%	0.0%	5.7%	12.5%	81.8%
Mathematics	Grade 3	11	0.0%	0.0%	9.1%	9.1%	81.8%
	Grade 5	10	0.0%	0.0%	10.0%	30.0%	60.0%
	Grade 8	11	0.0%	0.0%	0.0%	9.1%	90.9%
	High School	12	0.0%	0.0%	0.0%	16.7%	83.3%
Reading	Grade 3	12	0.0%	0.0%	25.0%	8.3%	66.7%
	Grade 5	11	0.0%	0.0%	0.0%	0.0%	100.0%
	Grade 8	11	0.0%	0.0%	0.0%	9.1%	90.9%
	High School	10	0.0%	0.0%	0.0%	20.0%	80.0%

Question 27

Which content area did you work on during this standard setting?

Content Area	Grade Level	N	Mathematics	Reading
Overall		89	50.6%	49.4%
Mathematics	Grade 3	11	100.0%	0.0%
	Grade 5	11	100.0%	0.0%
	Grade 8	11	100.0%	0.0%
	High School	12	100.0%	0.0%
Reading	Grade 3	12	0.0%	100.0%
	Grade 5	11	0.0%	100.0%
	Grade 8	11	0.0%	100.0%
	High School	10	0.0%	100.0%

Question 28

Which grade did you work on during this standard setting?

Content Area	Grade Level	N	Grade 3	Grade 5
Overall		89	25.8%	24.7%
Mathematics	Grade 3	11	100.0%	0.0%
	Grade 5	11	0.0%	100.0%
	Grade 8	11	0.0%	0.0%
	High School	12	0.0%	0.0%
Reading	Grade 3	12	100.0%	0.0%
	Grade 5	11	0.0%	100.0%
	Grade 8	11	0.0%	0.0%
	High School	10	0.0%	0.0%

Content Area	Grade Level	N	Grade 8	High School
Overall		89	24.7%	24.7%
Mathematics	Grade 3	11	0.0%	0.0%
	Grade 5	11	0.0%	0.0%
	Grade 8	11	100.0%	0.0%
	High School	12	0.0%	100.0%
Reading	Grade 3	12	0.0%	0.0%
	Grade 5	11	0.0%	0.0%
	Grade 8	11	100.0%	0.0%
	High School	10	0.0%	100.0%

Question 29

What is your occupation?

Content Area	Grade Level	N	Teacher	Administrator	Other
Overall		88	76.1%	8.0%	15.9%
Mathematics	Grade 3	11	90.9%	0.0%	9.1%
	Grade 5	11	72.7%	27.3%	0.0%
	Grade 8	11	81.8%	9.1%	9.1%
	High School	12	91.7%	0.0%	8.3%
Reading	Grade 3	12	75.0%	0.0%	25.0%
	Grade 5	10	60.0%	20.0%	20.0%
	Grade 8	11	63.6%	9.1%	27.3%
	High School	10	70.0%	0.0%	30.0%

Question 30

How many years in your current profession?

Content Area	Grade Level	N	1-5	6-10	11-15
Overall		87	6.9%	29.9%	17.2%
Mathematics	Grade 3	11	0.0%	0.0%	27.3%
	Grade 5	11	18.2%	36.4%	9.1%
	Grade 8	11	0.0%	54.5%	27.3%
	High School	12	0.0%	25.0%	16.7%
Reading	Grade 3	12	0.0%	25.0%	8.3%
	Grade 5	10	10.0%	40.0%	20.0%
	Grade 8	10	20.0%	20.0%	10.0%
	High School	10	10.0%	40.0%	20.0%

Content Area	Grade Level	N	16-20	21+
Overall		87	17.2%	28.7%
Mathematics	Grade 3	11	18.2%	54.5%
	Grade 5	11	18.2%	18.2%
	Grade 8	11	9.1%	9.1%
	High School	12	25.0%	33.3%
Reading	Grade 3	12	25.0%	41.7%
	Grade 5	10	0.0%	30.0%
	Grade 8	10	20.0%	30.0%
	High School	10	20.0%	10.0%

Question 31

What is your education level?

Content Area	Grade Level	N	Bachelor's	Master's	Doctorate
Overall		87	23.0%	74.7%	2.3%
Mathematics	Grade 3	11	27.3%	72.7%	0.0%
	Grade 5	11	9.1%	90.9%	0.0%
	Grade 8	11	36.4%	63.6%	0.0%
	High School	12	25.0%	66.7%	8.3%
Reading	Grade 3	12	25.0%	75.0%	0.0%
	Grade 5	10	40.0%	50.0%	10.0%
	Grade 8	10	0.0%	100.0%	0.0%
	High School	10	20.0%	80.0%	0.0%

Question 32

What is your gender?

Content Area	Grade Level	N	Male	Female
Overall		88	11.4%	88.6%
Mathematics	Grade 3	11	9.1%	90.9%
	Grade 5	11	18.2%	81.8%
	Grade 8	11	18.2%	81.8%
	High School	12	16.7%	83.3%
Reading	Grade 3	12	16.7%	83.3%
	Grade 5	10	0.0%	100.0%
	Grade 8	11	9.1%	90.9%
	High School	10	0.0%	100.0%

Question 33

What is your racial/ethnic background?

Content Area	Grade Level	N	Asian/Pacific Islander	African American	American Indian
Overall		87	1.1%	3.4%	3.4%
Mathematics	Grade 3	11	0.0%	0.0%	0.0%
	Grade 5	11	0.0%	0.0%	0.0%
	Grade 8	11	0.0%	9.1%	0.0%
	High School	11	0.0%	9.1%	0.0%
Reading	Grade 3	12	0.0%	0.0%	16.7%
	Grade 5	10	0.0%	10.0%	10.0%
	Grade 8	11	0.0%	0.0%	0.0%
	High School	10	10.0%	0.0%	0.0%

Content Area	Grade Level	N	Hispanic	White	Other
Overall		87	10.3%	73.6%	8.0%
Mathematics	Grade 3	11	18.2%	72.7%	9.1%
	Grade 5	11	9.1%	90.9%	0.0%
	Grade 8	11	18.2%	72.7%	0.0%
	High School	11	0.0%	81.8%	9.1%
Reading	Grade 3	12	25.0%	50.0%	8.3%
	Grade 5	10	10.0%	50.0%	20.0%
	Grade 8	11	0.0%	90.9%	9.1%
	High School	10	0.0%	80.0%	10.0%

Question 34

Have you taught Special Education?

Content Area	Grade Level	N	Yes	No
Overall		87	24.1%	75.9%
Mathematics	Grade 3	11	18.2%	81.8%
	Grade 5	11	27.3%	72.7%
	Grade 8	11	27.3%	72.7%
	High School	12	8.3%	91.7%
Reading	Grade 3	12	25.0%	75.0%
	Grade 5	10	20.0%	80.0%
	Grade 8	10	50.0%	50.0%
	High School	10	20.0%	80.0%

Question 35

Have you taught ESL/ELL?

Content Area	Grade Level	N	Yes	No
Overall		87	50.6%	49.4%
Mathematics	Grade 3	11	36.4%	63.6%
	Grade 5	11	54.5%	45.5%
	Grade 8	11	45.5%	54.5%
	High School	12	25.0%	75.0%
Reading	Grade 3	12	75.0%	25.0%
	Grade 5	10	90.0%	10.0%
	Grade 8	10	40.0%	60.0%
	High School	10	40.0%	60.0%

Question 36

Have you taught Vocational Education?

Content Area	Grade Level	N	Yes	No
Overall		87	9.2%	90.8%
Mathematics	Grade 3	11	0.0%	100.0%
	Grade 5	11	0.0%	100.0%
	Grade 8	11	27.3%	72.7%
	High School	12	16.7%	83.3%
Reading	Grade 3	12	0.0%	100.0%
	Grade 5	10	0.0%	100.0%
	Grade 8	10	10.0%	90.0%
	High School	10	20.0%	80.0%

Question 37

Have you taught Alternative Education?

Content Area	Grade Level	N	Yes	No
Overall		86	9.3%	90.7%
Mathematics	Grade 3	11	0.0%	100.0%
	Grade 5	11	0.0%	100.0%
	Grade 8	11	27.3%	72.7%
	High School	11	0.0%	100.0%
Reading	Grade 3	12	0.0%	100.0%
	Grade 5	10	0.0%	100.0%
	Grade 8	10	20.0%	80.0%
	High School	10	30.0%	70.0%

Question 38

Have you taught Adult Education?

Content Area	Grade Level	N	Yes	No
Overall		87	43.7%	56.3%
Mathematics	Grade 3	11	36.4%	63.6%
	Grade 5	11	36.4%	63.6%
	Grade 8	11	54.5%	45.5%
	High School	12	41.7%	58.3%
Reading	Grade 3	12	33.3%	66.7%
	Grade 5	10	70.0%	30.0%
	Grade 8	10	30.0%	70.0%
	High School	10	50.0%	50.0%

Section G

Participants' Recommended Cut Scores Plus and Minus One, Two, and Three Standard Errors with Associated Impact Data

Calculating a Meaningful Standard Error for the Bookmark Cut Score

In the Bookmark Standard Setting Procedure for a given grade and content area, participants are assigned to roughly equivalent small groups that work independently through Round 2. Thus, the set of Round 2 cut scores provide some information about the stability of consensus in Bookmark cut scores across independent small group replications. To quantify this degree of consensus, we calculate the cluster sample standard error (Cochran, 1963, p. 210) of the Round 2 mean cut score. Cluster sample standard errors are appropriate when, as may be reasonably assumed here, data are collected from groups and independence can be assumed between groups but not within groups.

For the Bookmark Procedure, the standard error of the Bookmark cut score (SE_{cut}) is based on the cluster sample standard error of the Round 2 mean cut score. Because the final Bookmark cut scores are based on the *median* of the group instead of the mean, this cluster sample standard error (SE_{cut}) is adjusted by $\sqrt{\frac{\pi}{2}}$ (Huynh, 2003). The standard error of the Bookmark cut score is:

$$SE_{cut} = \left(\sqrt{\frac{\pi}{2}} \right) \left(\sqrt{\frac{S^2}{N} \left[1 + \left(\frac{N}{n} - 1 \right) r \right]} \right),$$

where S^2 is the sample variance of individual Round 2 cut scores, r is the Round 2 intraclass correlation, N is the number of participants, and n is the number of groups. To be precise, if Y_{ik} is the cut score from the i^{th} participant in the k^{th} group, \bar{Y}_k is the average cut score for group k , and $\bar{\bar{Y}}$ is the average of all Round 2 cut scores, then

$$r = \frac{Var(\bar{Y}_k)}{Var(\bar{Y}_k) + Var(Y_{ik} - \bar{Y}_k)} \quad \text{and} \quad S^2 = \frac{1}{N-1} \sum_{n,k} (Y_{nk} - \bar{\bar{Y}})^2$$

If we have only two groups ($n=2$) and perfect dependence (agreement) within groups ($r=1$), then the cluster sample standard error simplifies to $SE_{cut} = \left(\sqrt{\frac{\pi}{2}} \right) \left(\frac{|Y_1 - Y_2|}{2} \right)$, which is the standard error formula employed by NAEP

for two independent replications of a modified Angoff procedure (ACT, 1983, pp. 4-8). If, on the other hand, individual participants acted independently of their groups ($r=0$), then the cluster sample standard error simplifies to the traditional standard error of the mean for independent observations, $SE_{cut} = \left(\sqrt{\frac{\pi}{2}} \right) \left(\sqrt{\frac{S^2}{N}} \right)$. In this

manner, SE_{cut} provides a simple, flexible, and general way to quantify the amount of uncertainty associated with final Bookmark cut scores.

It is appropriate (if statistically imprecise) to say that repeated replications of this very standard setting procedure with different judges sampled from the same population of potential judges would result in a range of cut scores, most of which would fall in a band of width $4 * SE_{cut}$. In the graphical displays of participant data, we depict such an interval centered at the median of the Round 3 cut score. The purpose of calculating statistics like SE_{cut} and producing graphs of the types displayed here is to effectively communicate the complex information that is gathered during a Bookmark Standard Setting Procedure.

References

ACT (1993). Setting achievement levels on the 1992 National Assessment of Educational Progress in Mathematics, Reading, and Writing: A technical report on reliability and validity.

Cochran, W. G. (1963). *Sampling techniques*. New York: John Wiley & Sons.

Huynh, H. (2003, August). Technical Memorandum for Computing Standard Error in Bookmark Standard Setting. (The South Carolina PACT 2003 Standard Setting Support Project). Columbia: University of South Carolina.

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		6.21	3.25	4.02	
Recommended Cut Point* + 3 SE		405	430	504	+ 3 SE
Percent of Students in Each Level	19.2	16.8	48.9	15.1	
Recommended Cut Point* + 2 SE		398	427	500	+ 2 SE
Percent of Students in Each Level	16.1	17.7	51.1	15.1	
Recommended Cut Point* + 1 SE		392	423	496	+ 1 SE
Percent of Students in Each Level	12.2	17.6	52.0	18.2	
Recommended Cut Point*		386	420	492	Recommended Cut Points*
Percent of Students in Each Level	9.5	18.5	51.1	20.9	
Recommended Cut Point* -1 SE		380	417	488	-1 SE
Percent of Students in Each Level	6.9	19.3	52.8	21.0	
Recommended Cut Point* -2 SE		374	414	484	-2 SE
Percent of Students in Each Level	5.3	18.7	51.0	25.0	
Recommended Cut Point* -3 SE		367	410	480	-3 SE
Percent of Students in Each Level	3.9	18.2	49.7	28.2	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		11.00	11.00	15.00	
Recommended Cut Point* + 3 SE		419	453	537	+ 3 SE
Percent of Students in Each Level	28.0	25.8	41.9	4.3	
Recommended Cut Point* + 2 SE		408	442	522	+ 2 SE
Percent of Students in Each Level	20.6	22.4	50.7	6.3	
Recommended Cut Point* + 1 SE		397	431	507	+ 1 SE
Percent of Students in Each Level	14.7	21.3	52.3	11.7	
Recommended Cut Point*		386	420	492	Recommended Cut Points*
Percent of Students in Each Level	9.5	18.5	51.1	20.9	
Recommended Cut Point* -1 SE		375	409	477	-1 SE
Percent of Students in Each Level	6.0	14.6	47.8	31.6	
Recommended Cut Point* -2 SE		364	398	462	-2 SE
Percent of Students in Each Level	3.4	12.7	43.9	40.0	
Recommended Cut Point* -3 SE		353	387	447	-3 SE
Percent of Students in Each Level	1.8	9.1	37.4	51.7	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		12.63	11.47	15.52	
Recommended Cut Point* + 3 SE		424	454	539	+ 3 SE
Percent of Students in Each Level	31.6	22.2	41.9	4.3	
Recommended Cut Point* + 2 SE		411	443	523	+ 2 SE
Percent of Students in Each Level	22.1	23.3	48.2	6.4	
Recommended Cut Point* + 1 SE		399	431	508	+ 1 SE
Percent of Students in Each Level	16.1	19.9	52.3	11.7	
Recommended Cut Point*		386	420	492	Recommended Cut Points*
Percent of Students in Each Level	9.5	18.5	51.1	20.9	
Recommended Cut Point* -1 SE		373	409	476	-1 SE
Percent of Students in Each Level	5.3	15.3	47.8	31.6	
Recommended Cut Point* -2 SE		361	397	461	-2 SE
Percent of Students in Each Level	2.7	12.0	45.3	40.0	
Recommended Cut Point* -3 SE		348	386	445	-3 SE
Percent of Students in Each Level	1.0	8.5	35.9	54.6	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		13.62	12.14	11.08	
Recommended Cut Point* + 3 SE		471	512	583	+ 3 SE
Percent of Students in Each Level	28.9	29.0	35.6	6.5	
Recommended Cut Point* + 2 SE		457	500	572	+ 2 SE
Percent of Students in Each Level	20.3	28.9	41.3	9.5	
Recommended Cut Point* + 1 SE		444	488	561	+ 1 SE
Percent of Students in Each Level	12.7	27.1	47.3	12.9	
Recommended Cut Point*		430	476	550	Recommended Cut Points*
Percent of Students in Each Level	7.4	23.3	49.7	19.6	
Recommended Cut Point* -1 SE		416	464	539	-1 SE
Percent of Students in Each Level	3.6	19.7	54.1	22.6	
Recommended Cut Point* -2 SE		403	452	528	-2 SE
Percent of Students in Each Level	1.1	15.8	54.3	28.8	
Recommended Cut Point* -3 SE		389	440	517	-3 SE
Percent of Students in Each Level	0.3	11.2	49.9	38.6	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		11.00	11.00	17.00	
Recommended Cut Point* + 3 SE		463	509	601	+ 3 SE
Percent of Students in Each Level	23.4	31.7	41.1	3.8	
Recommended Cut Point* + 2 SE		452	498	584	+ 2 SE
Percent of Students in Each Level	16.9	29.4	47.3	6.4	
Recommended Cut Point* + 1 SE		441	487	567	+ 1 SE
Percent of Students in Each Level	11.5	28.3	50.6	9.6	
Recommended Cut Point*		430	476	550	Recommended Cut Points*
Percent of Students in Each Level	7.4	23.3	49.7	19.6	
Recommended Cut Point* -1 SE		419	465	533	-1 SE
Percent of Students in Each Level	4.2	20.9	49.6	25.3	
Recommended Cut Point* -2 SE		408	454	516	-2 SE
Percent of Students in Each Level	1.7	16.9	42.7	38.7	
Recommended Cut Point* -3 SE		397	443	499	-3 SE
Percent of Students in Each Level	0.6	12.1	33.6	53.7	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		17.50	16.38	20.29	
Recommended Cut Point* + 3 SE		483	525	611	+ 3 SE
Percent of Students in Each Level	37.5	29.9	30.4	2.2	
Recommended Cut Point* + 2 SE		465	509	591	+ 2 SE
Percent of Students in Each Level	25.1	30.0	41.1	3.8	
Recommended Cut Point* + 1 SE		448	492	570	+ 1 SE
Percent of Students in Each Level	15.5	26.5	48.4	9.6	
Recommended Cut Point*		430	476	550	Recommended Cut Points*
Percent of Students in Each Level	7.4	23.3	49.7	19.6	
Recommended Cut Point* -1 SE		413	460	530	-1 SE
Percent of Students in Each Level	2.9	19.0	49.3	28.8	
Recommended Cut Point* -2 SE		395	443	509	-2 SE
Percent of Students in Each Level	0.6	12.1	42.4	44.9	
Recommended Cut Point* -3 SE		378	427	489	-3 SE
Percent of Students in Each Level	0.1	6.2	33.5	60.2	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		14.02	8.78	25.71	
Recommended Cut Point* + 3 SE		533	582	700	+ 3 SE
Percent of Students in Each Level	33.1	33.8	31.4	1.7	
Recommended Cut Point* + 2 SE		519	574	674	+ 2 SE
Percent of Students in Each Level	23.8	36.8	36.6	2.8	
Recommended Cut Point* + 1 SE		505	565	649	+ 1 SE
Percent of Students in Each Level	16.5	38.0	38.8	6.7	
Recommended Cut Point*		491	556	623	Recommended Cut Points*
Percent of Students in Each Level	10.6	38.5	37.3	13.6	
Recommended Cut Point* -1 SE		477	547	597	-1 SE
Percent of Students in Each Level	6.1	37.4	33.6	22.9	
Recommended Cut Point* -2 SE		463	538	572	-2 SE
Percent of Students in Each Level	3.2	35.2	22.1	39.5	
Recommended Cut Point* -3 SE		449	530	546	-3 SE
Percent of Students in Each Level	1.2	31.9	10.4	56.5	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		13.00	14.00	20.00	
Recommended Cut Point* + 3 SE		530	598	683	+ 3 SE
Percent of Students in Each Level	33.1	44.0	20.1	2.8	
Recommended Cut Point* + 2 SE		517	584	663	+ 2 SE
Percent of Students in Each Level	23.8	43.1	28.8	4.3	
Recommended Cut Point* + 1 SE		504	570	643	+ 1 SE
Percent of Students in Each Level	16.5	44.1	30.7	8.7	
Recommended Cut Point*		491	556	623	Recommended Cut Points*
Percent of Students in Each Level	10.6	38.5	37.3	13.6	
Recommended Cut Point* -1 SE		478	542	603	-1 SE
Percent of Students in Each Level	7.0	33.9	39.1	20.0	
Recommended Cut Point* -2 SE		465	528	583	-2 SE
Percent of Students in Each Level	3.2	27.0	36.7	33.1	
Recommended Cut Point* -3 SE		452	514	563	-3 SE
Percent of Students in Each Level	1.6	20.2	32.8	45.4	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		19.11	16.52	32.57	
Recommended Cut Point* + 3 SE		548	606	721	+ 3 SE
Percent of Students in Each Level	43.5	36.5	18.3	1.7	
Recommended Cut Point* + 2 SE		529	589	688	+ 2 SE
Percent of Students in Each Level	30.2	40.8	26.1	2.9	
Recommended Cut Point* + 1 SE		510	573	656	+ 1 SE
Percent of Students in Each Level	19.8	40.8	35.1	4.3	
Recommended Cut Point*		491	556	623	Recommended Cut Points*
Percent of Students in Each Level	10.6	38.5	37.3	13.6	
Recommended Cut Point* -1 SE		472	539	590	-1 SE
Percent of Students in Each Level	5.1	33.4	32.6	28.9	
Recommended Cut Point* -2 SE		453	523	558	-2 SE
Percent of Students in Each Level	1.6	26.5	23.7	48.2	
Recommended Cut Point* -3 SE		434	506	525	-3 SE
Percent of Students in Each Level	0.4	17.6	10.1	71.9	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 High School Mathematics

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		8.03	6.75	7.49	
Recommended Cut Point* + 3 SE		692	703	772	+ 3 SE
Percent of Students in Each Level	45.8	10.4	37.6	6.2	
Recommended Cut Point* + 2 SE		684	697	765	+ 2 SE
Percent of Students in Each Level	38.2	11.6	42.4	7.8	
Recommended Cut Point* + 1 SE		676	690	757	+ 1 SE
Percent of Students in Each Level	31.3	12.5	46.7	9.5	
Recommended Cut Point*		668	683	750	Recommended Cut Points*
Percent of Students in Each Level	23.5	12.9	50.5	13.1	
Recommended Cut Point* -1 SE		660	676	743	-1 SE
Percent of Students in Each Level	17.9	13.3	53.8	15.0	
Recommended Cut Point* -2 SE		652	670	735	-2 SE
Percent of Students in Each Level	12.9	12.0	56.4	18.7	
Recommended Cut Point* -3 SE		644	663	728	-3 SE
Percent of Students in Each Level	8.4	12.2	54.8	24.6	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 High School Mathematics

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		8.00	8.00	13.00	
Recommended Cut Point* + 3 SE		692	707	789	+ 3 SE
Percent of Students in Each Level	45.8	14.7	36.3	3.2	
Recommended Cut Point* + 2 SE		684	699	776	+ 2 SE
Percent of Students in Each Level	38.2	13.7	43.4	4.7	
Recommended Cut Point* + 1 SE		676	691	763	+ 1 SE
Percent of Students in Each Level	31.3	12.5	48.4	7.8	
Recommended Cut Point*		668	683	750	Recommended Cut Points*
Percent of Students in Each Level	23.5	12.9	50.5	13.1	
Recommended Cut Point* -1 SE		660	675	737	-1 SE
Percent of Students in Each Level	17.9	11.7	51.7	18.7	
Recommended Cut Point* -2 SE		652	667	724	-2 SE
Percent of Students in Each Level	12.9	10.6	49.8	26.7	
Recommended Cut Point* -3 SE		644	659	711	-3 SE
Percent of Students in Each Level	8.4	9.5	44.8	37.3	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 High School Mathematics

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		11.33	10.46	15.00	
Recommended Cut Point* + 3 SE		702	714	795	+ 3 SE
Percent of Students in Each Level	54.1	10.8	33.1	2.0	
Recommended Cut Point* + 2 SE		691	704	780	+ 2 SE
Percent of Students in Each Level	43.8	12.3	39.2	4.7	
Recommended Cut Point* + 1 SE		679	693	765	+ 1 SE
Percent of Students in Each Level	33.0	12.8	46.5	7.7	
Recommended Cut Point*		668	683	750	Recommended Cut Points*
Percent of Students in Each Level	23.5	12.9	50.5	13.1	
Recommended Cut Point* -1 SE		657	673	735	-1 SE
Percent of Students in Each Level	16.6	11.5	53.2	18.7	
Recommended Cut Point* -2 SE		645	662	720	-2 SE
Percent of Students in Each Level	9.5	9.8	52.0	28.7	
Recommended Cut Point* -3 SE		634	652	705	-3 SE
Percent of Students in Each Level	4.5	8.4	45.4	41.7	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		10.93	8.94	23.85	
Recommended Cut Point* + 3 SE		412	458	588	+ 3 SE
Percent of Students in Each Level	22.9	31.1	45.3	0.7	
Recommended Cut Point* + 2 SE		401	449	564	+ 2 SE
Percent of Students in Each Level	17.4	29.6	52.3	0.7	
Recommended Cut Point* + 1 SE		390	440	540	+ 1 SE
Percent of Students in Each Level	13.2	28.3	54.5	4.0	
Recommended Cut Point*		379	431	516	Recommended Cut Points*
Percent of Students in Each Level	8.7	24.8	56.2	10.3	
Recommended Cut Point* -1 SE		368	422	492	-1 SE
Percent of Students in Each Level	6.0	22.8	48.5	22.7	
Recommended Cut Point* -2 SE		357	413	468	-2 SE
Percent of Students in Each Level	2.8	20.1	38.3	38.8	
Recommended Cut Point* -3 SE		346	404	444	-3 SE
Percent of Students in Each Level	1.4	17.8	25.0	55.8	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		13.00	12.00	20.00	
Recommended Cut Point* + 3 SE		418	467	576	+ 3 SE
Percent of Students in Each Level	26.7	34.5	38.1	0.7	
Recommended Cut Point* + 2 SE		405	455	556	+ 2 SE
Percent of Students in Each Level	19.1	31.5	47.5	1.9	
Recommended Cut Point* + 1 SE		392	443	536	+ 1 SE
Percent of Students in Each Level	14.7	26.9	54.5	3.9	
Recommended Cut Point*		379	431	516	Recommended Cut Points*
Percent of Students in Each Level	8.7	24.8	56.2	10.3	
Recommended Cut Point* -1 SE		366	419	496	-1 SE
Percent of Students in Each Level	4.6	22.0	54.3	19.1	
Recommended Cut Point* -2 SE		353	407	476	-2 SE
Percent of Students in Each Level	2.0	18.9	48.6	30.5	
Recommended Cut Point* -3 SE		340	395	456	-3 SE
Percent of Students in Each Level	0.9	13.8	39.3	46.0	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		16.98	14.96	31.12	
Recommended Cut Point* + 3 SE		430	476	609	+ 3 SE
Percent of Students in Each Level	33.4	36.1	30.3	0.2	
Recommended Cut Point* + 2 SE		413	461	578	+ 2 SE
Percent of Students in Each Level	22.9	34.8	41.7	0.6	
Recommended Cut Point* + 1 SE		396	446	547	+ 1 SE
Percent of Students in Each Level	15.8	28.4	54.0	1.8	
Recommended Cut Point*		379	431	516	Recommended Cut Points*
Percent of Students in Each Level	8.7	24.8	56.2	10.3	
Recommended Cut Point* -1 SE		362	416	485	-1 SE
Percent of Students in Each Level	3.7	21.0	48.5	26.8	
Recommended Cut Point* -2 SE		345	401	454	-2 SE
Percent of Students in Each Level	1.4	16.1	33.2	49.3	
Recommended Cut Point* -3 SE		328	386	423	-3 SE
Percent of Students in Each Level	0.2	11.4	17.2	71.2	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		20.46	16.70	19.57	
Recommended Cut Point* + 3 SE		478	524	604	+ 3 SE
Percent of Students in Each Level	39.8	38.9	20.2	1.1	
Recommended Cut Point* + 2 SE		458	507	584	+ 2 SE
Percent of Students in Each Level	28.3	34.1	34.5	3.1	
Recommended Cut Point* + 1 SE		437	491	565	+ 1 SE
Percent of Students in Each Level	15.9	35.9	42.9	5.3	
Recommended Cut Point*		417	474	545	Recommended Cut Points*
Percent of Students in Each Level	6.8	30.2	50.3	12.7	
Recommended Cut Point* -1 SE		397	457	525	-1 SE
Percent of Students in Each Level	1.4	25.2	52.1	21.3	
Recommended Cut Point* -2 SE		376	441	506	-2 SE
Percent of Students in Each Level	0.2	17.6	44.7	37.5	
Recommended Cut Point* -3 SE		356	424	486	-3 SE
Percent of Students in Each Level	0.1	9.2	36.1	54.6	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		12.00	12.00	19.00	
Recommended Cut Point* + 3 SE		453	510	602	+ 3 SE
Percent of Students in Each Level	24.8	41.3	32.8	1.1	
Recommended Cut Point* + 2 SE		441	498	583	+ 2 SE
Percent of Students in Each Level	17.7	37.3	41.8	3.2	
Recommended Cut Point* + 1 SE		429	486	564	+ 1 SE
Percent of Students in Each Level	12.5	33.0	49.2	5.3	
Recommended Cut Point*		417	474	545	Recommended Cut Points*
Percent of Students in Each Level	6.8	30.2	50.3	12.7	
Recommended Cut Point* -1 SE		405	462	526	-1 SE
Percent of Students in Each Level	3.3	27.1	48.3	21.3	
Recommended Cut Point* -2 SE		393	450	507	-2 SE
Percent of Students in Each Level	1.4	21.8	39.3	37.5	
Recommended Cut Point* -3 SE		381	438	488	-3 SE
Percent of Students in Each Level	0.3	15.6	33.2	50.9	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		23.71	20.56	27.27	
Recommended Cut Point* + 3 SE		488	536	627	+ 3 SE
Percent of Students in Each Level	49.0	33.9	17.0	0.1	
Recommended Cut Point* + 2 SE		464	515	600	+ 2 SE
Percent of Students in Each Level	30.4	39.7	28.8	1.1	
Recommended Cut Point* + 1 SE		441	495	572	+ 1 SE
Percent of Students in Each Level	17.7	37.3	41.8	3.2	
Recommended Cut Point*		417	474	545	Recommended Cut Points*
Percent of Students in Each Level	6.8	30.2	50.3	12.7	
Recommended Cut Point* -1 SE		393	453	518	-1 SE
Percent of Students in Each Level	1.4	23.5	49.9	25.2	
Recommended Cut Point* -2 SE		370	433	490	-2 SE
Percent of Students in Each Level	0.1	14.0	37.6	48.3	
Recommended Cut Point* -3 SE		346	412	463	-3 SE
Percent of Students in Each Level	0.1	5.4	24.9	69.6	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		7.05	10.16	11.75	
Recommended Cut Point* + 3 SE		460	524	626	+ 3 SE
Percent of Students in Each Level	11.0	38.7	47.1	3.2	
Recommended Cut Point* + 2 SE		453	514	615	+ 2 SE
Percent of Students in Each Level	9.4	33.6	51.2	5.8	
Recommended Cut Point* + 1 SE		446	504	603	+ 1 SE
Percent of Students in Each Level	6.4	30.5	57.3	5.8	
Recommended Cut Point*		439	494	591	Recommended Cut Points*
Percent of Students in Each Level	4.5	23.4	60.0	12.1	
Recommended Cut Point* -1 SE		432	484	579	-1 SE
Percent of Students in Each Level	3.3	19.6	60.9	16.2	
Recommended Cut Point* -2 SE		425	474	568	-2 SE
Percent of Students in Each Level	2.3	16.5	61.2	20.0	
Recommended Cut Point* -3 SE		418	464	556	-3 SE
Percent of Students in Each Level	1.3	11.4	59.4	27.9	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		15.00	14.00	22.00	
Recommended Cut Point* + 3 SE		484	536	657	+ 3 SE
Percent of Students in Each Level	22.9	33.4	43.1	0.6	
Recommended Cut Point* + 2 SE		469	522	635	+ 2 SE
Percent of Students in Each Level	14.2	35.4	48.4	2.0	
Recommended Cut Point* + 1 SE		454	508	613	+ 1 SE
Percent of Students in Each Level	9.4	30.6	54.3	5.7	
Recommended Cut Point*		439	494	591	Recommended Cut Points*
Percent of Students in Each Level	4.5	23.4	60.0	12.1	
Recommended Cut Point* -1 SE		424	480	569	-1 SE
Percent of Students in Each Level	1.7	19.1	59.3	19.9	
Recommended Cut Point* -2 SE		409	466	547	-2 SE
Percent of Students in Each Level	0.8	13.4	49.9	35.9	
Recommended Cut Point* -3 SE		394	452	525	-3 SE
Percent of Students in Each Level	0.1	7.8	41.7	50.4	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		16.57	17.29	24.94	
Recommended Cut Point* + 3 SE		489	546	666	+ 3 SE
Percent of Students in Each Level	24.9	39.2	35.3	0.6	
Recommended Cut Point* + 2 SE		472	529	641	+ 2 SE
Percent of Students in Each Level	16.4	36.4	45.2	2.0	
Recommended Cut Point* + 1 SE		456	511	616	+ 1 SE
Percent of Students in Each Level	9.4	30.6	56.8	3.2	
Recommended Cut Point*		439	494	591	Recommended Cut Points*
Percent of Students in Each Level	4.5	23.4	60.0	12.1	
Recommended Cut Point* -1 SE		422	477	566	-1 SE
Percent of Students in Each Level	1.7	17.1	57.6	23.6	
Recommended Cut Point* -2 SE		406	459	541	-2 SE
Percent of Students in Each Level	0.5	10.5	49.0	40.0	
Recommended Cut Point* -3 SE		389	442	516	-3 SE
Percent of Students in Each Level	0.1	5.2	37.7	57.0	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 High School Reading
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
SE (cut score)		8.73	2.99	6.56	
Recommended Cut Point* + 3 SE		653	679	773	+ 3 SE
Percent of Students in Each Level	23.0	16.3	53.5	7.2	
Recommended Cut Point* + 2 SE		644	676	766	+ 2 SE
Percent of Students in Each Level	17.6	19.0	56.3	7.1	
Recommended Cut Point* + 1 SE		636	673	760	+ 1 SE
Percent of Students in Each Level	14.1	19.9	55.7	10.3	
Recommended Cut Point*		627	670	753	Recommended Cut Points*
Percent of Students in Each Level	9.2	22.4	54.7	13.7	
Recommended Cut Point* -1 SE		618	667	746	-1 SE
Percent of Students in Each Level	6.2	23.1	57.0	13.7	
Recommended Cut Point* -2 SE		610	664	740	-2 SE
Percent of Students in Each Level	3.6	25.7	53.4	17.3	
Recommended Cut Point* -3 SE		601	661	733	-3 SE
Percent of Students in Each Level	1.7	25.4	52.0	20.9	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 High School Reading
 Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement		13.00	12.00	19.00	
Recommended Cut Point* + 3 SE		666	706	810	+ 3 SE
Percent of Students in Each Level	29.3	28.6	41.2	0.9	
Recommended Cut Point* + 2 SE		653	694	791	+ 2 SE
Percent of Students in Each Level	23.0	28.2	46.5	2.3	
Recommended Cut Point* + 1 SE		640	682	772	+ 1 SE
Percent of Students in Each Level	15.8	26.3	50.7	7.2	
Recommended Cut Point*		627	670	753	Recommended Cut Points*
Percent of Students in Each Level	9.2	22.4	54.7	13.7	
Recommended Cut Point* -1 SE		614	658	734	-1 SE
Percent of Students in Each Level	4.8	20.2	54.1	20.9	
Recommended Cut Point* -2 SE		601	646	715	-2 SE
Percent of Students in Each Level	1.7	17.7	45.4	35.2	
Recommended Cut Point* -3 SE		588	634	696	-3 SE
Percent of Students in Each Level	0.7	11.7	38.7	48.9	

* Participants' Large Group Medians

AIMS Bookmark Standard Setting May 2005 High School Reading

Recommended Cut Points* Plus/Minus Selected Standard Errors (SEs) of Measurement and the Cut Score

Performance Level	Falls Far Below	Approaches	Meets	Exceeds	
Standard Error (SE) measurement + cutscore		15.65	12.36	20.10	
Recommended Cut Point* + 3 SE		674	707	813	+ 3 SE
Percent of Students in Each Level	34.0	27.4	37.7	0.9	
Recommended Cut Point* + 2 SE		658	695	793	+ 2 SE
Percent of Students in Each Level	25.1	26.1	46.5	2.3	
Recommended Cut Point* + 1 SE		643	682	773	+ 1 SE
Percent of Students in Each Level	17.6	24.5	50.7	7.2	
Recommended Cut Point*		627	670	753	Recommended Cut Points*
Percent of Students in Each Level	9.2	22.4	54.7	13.7	
Recommended Cut Point* -1 SE		611	658	733	-1 SE
Percent of Students in Each Level	3.6	21.5	54.1	20.8	
Recommended Cut Point* -2 SE		596	645	713	-2 SE
Percent of Students in Each Level	1.1	16.5	47.2	35.2	
Recommended Cut Point* -3 SE		580	633	693	-3 SE
Percent of Students in Each Level	0.3	12.2	35.7	51.8	

* Participants' Large Group Medians

Section H

Detailed Results of the Bookmark Standard Setting

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	17	25	55
1	6	12	39	56
1	9	16	49	69
1	12	18	38	57
2	1	13	30	54
2	4	16	33	54
2	7	15	39	47
2	11	21	50	66
3	3	16	35	64
3	5	22	43	65
3	8	14	25	64
3	10	31	44	64

Overall	Median	16	38.5	60.5
	Minimum	12	25	47
	Maximum	31	50	69
	SD	5.14	8.32	6.60

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	334	362	452
1	6	312	403	456
1	9	330	432	531
1	12	338	400	460
2	1	317	377	449
2	4	330	386	449
2	7	326	403	426
2	11	349	435	505
3	3	330	392	492
3	5	352	414	498
3	8	321	362	492
3	10	380	417	492

Overall	Median	330	400	472
	Minimum	312	362	426
	Maximum	380	435	531
	SD	18.40	24.13	30.60

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	16.5	38.5	56.5
Median	2	15.5	36	54
Median	3	19	39	64
Median	Overall	16	38.5	60.5
Minimum	1	12	25	55
Minimum	2	13	30	47
Minimum	3	14	25	64
Minimum	Overall	12	25	47
Maximum	1	18	49	69
Maximum	2	21	50	66
Maximum	3	31	44	65
Maximum	Overall	31	50	69
SD	1	2.63	9.84	6.55
SD	2	3.40	8.83	7.89
SD	3	7.63	8.81	0.50
SD	Overall	5.14	8.32	6.60

Overall	Median	16	38.5	60.5
	Minimum	12	25	47
	Maximum	31	50	69
	SD	5.14	8.32	6.60

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	332	402	458
Median	2	328	395	449
Median	3	341	403	492
Median	Overall	330	400	472
Minimum	1	312	362	452
Minimum	2	317	377	426
Minimum	3	321	362	492
Minimum	Overall	312	362	426
Maximum	1	338	432	531
Maximum	2	349	435	505
Maximum	3	380	417	498
Maximum	Overall	380	435	531
SD	1	11.47	28.72	37.64
SD	2	13.48	25.55	33.63
SD	3	26.29	25.41	3.00
SD	Overall	18.40	24.13	30.60

Overall	Median	330	400	472
	Minimum	312	362	426
	Maximum	380	435	531
	SD	18.40	24.13	30.60

AIMS Bookmark Standard Setting May 2005 Grade 3
 Mathematics
 Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	16.5	38.5	56.5
2	15.5	36	54
3	19	39	64
Overall	16	38.5	60.5

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	0.1	16.0	49.5	34.4

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	29	46	64
1	6	26	46	64
1	9	29	46	65
1	12	29	47	65
2	1	28	47	66
2	4	28	47	66
2	7	28	47	66
2	11	28	47	66
3	3	25	43	64
3	5	27	43	65
3	8	17	45	64
3	10	26	44	64

Overall	Median	28	46	65
	Minimum	17	43	64
	Maximum	29	47	66
	SD	3.31	1.56	0.90

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	374	423	492
1	6	365	423	492
1	9	374	423	498
1	12	374	426	498
2	1	371	426	505
2	4	371	426	505
2	7	371	426	505
2	11	371	426	505
3	3	362	414	492
3	5	368	414	498
3	8	334	420	492
3	10	365	417	492

Overall	Median	371	423	498
	Minimum	334	414	492
	Maximum	374	426	505
	SD	11.01	4.67	5.84

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	29	46	64.5
Median	2	28	47	66
Median	3	25.5	43.5	64
Median	Overall	28	46	65
Minimum	1	26	46	64
Minimum	2	28	47	66
Minimum	3	17	43	64
Minimum	Overall	17	43	64
Maximum	1	29	47	65
Maximum	2	28	47	66
Maximum	3	27	45	65
Maximum	Overall	29	47	66
SD	1	1.50	0.50	0.58
SD	2	0.00	0.00	0.00
SD	3	4.57	0.96	0.50
SD	Overall	3.31	1.56	0.90

Overall	Median	28	46	65
	Minimum	17	43	64
	Maximum	29	47	66
	SD	3.31	1.56	0.90

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	374	423	495
Median	2	371	426	505
Median	3	364	416	492
Median	Overall	371	423	498
Minimum	1	365	423	492
Minimum	2	371	426	505
Minimum	3	334	414	492
Minimum	Overall	334	414	492
Maximum	1	374	426	498
Maximum	2	371	426	505
Maximum	3	368	420	498
Maximum	Overall	374	426	505
SD	1	4.50	1.50	3.46
SD	2	0.00	0.00	0.00
SD	3	15.69	2.87	3.00
SD	Overall	11.01	4.67	5.84

Overall	Median	371	423	498
	Minimum	334	414	492
	Maximum	374	426	505
	SD	11.01	4.67	5.84

AIMS Bookmark Standard Setting May 2005 Grade 3
 Mathematics
 Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	29	46	64.5
2	28	47	66
3	25.5	43.5	64
Overall	28	46	65

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	4.6	25.2	52.0	18.2

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	33	46	66
1	6	33	46	66
1	9	33	46	66
1	12	33	46	66
2	1	33	46	66
2	4	33	46	66
2	7	33	46	66
2	11	33	46	66
3	3	33	45	64
3	5	27	43	65
3	8	17	45	64
3	10	33	44	64

Overall	Median	33	46	66
	Minimum	17	43	64
	Maximum	33	46	66
	SD	4.78	1.00	0.90

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	386	423	505
1	6	386	423	505
1	9	386	423	505
1	12	386	423	505
2	1	386	423	505
2	4	386	423	505
2	7	386	423	505
2	11	386	423	505
3	3	386	420	492
3	5	368	414	498
3	8	334	420	492
3	10	386	417	492

Overall	Median	386	423	505
	Minimum	334	414	492
	Maximum	386	423	505
	SD	15.43	2.99	5.87

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	33	46	66
Median	2	33	46	66
Median	3	30	44.5	64
Median	Overall	33	46	66
Minimum	1	33	46	66
Minimum	2	33	46	66
Minimum	3	17	43	64
Minimum	Overall	17	43	64
Maximum	1	33	46	66
Maximum	2	33	46	66
Maximum	3	33	45	65
Maximum	Overall	33	46	66
SD	1	0.00	0.00	0.00
SD	2	0.00	0.00	0.00
SD	3	7.55	0.96	0.50
SD	Overall	4.78	1.00	0.90

Overall	Median	33	46	66
	Minimum	17	43	64
	Maximum	33	46	66
	SD	4.78	1.00	0.90

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	386	423	505
Median	2	386	423	505
Median	3	377	419	492
Median	Overall	386	423	505
Minimum	1	386	423	505
Minimum	2	386	423	505
Minimum	3	334	414	492
Minimum	Overall	334	414	492
Maximum	1	386	423	505
Maximum	2	386	423	505
Maximum	3	386	420	498
Maximum	Overall	386	423	505
SD	1	0.00	0.00	0.00
SD	2	0.00	0.00	0.00
SD	3	24.52	2.87	3.00
SD	Overall	15.43	2.99	5.87

Overall	Median	386	423	505
	Minimum	334	414	492
	Maximum	386	423	505
	SD	15.43	2.99	5.87

AIMS Bookmark Standard Setting May 2005 Grade 3
 Mathematics
 Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	33	46	66
2	33	46	66
3	30	44.5	64
Overall	33	46	66

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	9.5	20.3	55.1	15.1

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	33	45	64
1	6	33	45	64
1	9	33	45	64
1	12	33	45	64
2	1	33	45	64
2	4	33	45	64
2	7	33	45	64
2	11	33	45	64
3	3	33	45	64
3	5	33	45	64
3	8	33	45	64
3	10	33	45	64

Overall	Median	33	45	64
	Minimum	33	45	64
	Maximum	33	45	64
	SD	0.00	0.00	0.00

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	386	420	492
1	6	386	420	492
1	9	386	420	492
1	12	386	420	492
2	1	386	420	492
2	4	386	420	492
2	7	386	420	492
2	11	386	420	492
3	3	386	420	492
3	5	386	420	492
3	8	386	420	492
3	10	386	420	492

Overall	Median	386	420	492
	Minimum	386	420	492
	Maximum	386	420	492
	SD	0.00	0.00	0.00

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	33	45	64
Median	2	33	45	64
Median	3	33	45	64
Median	Overall	33	45	64
Minimum	1	33	45	64
Minimum	2	33	45	64
Minimum	3	33	45	64
Minimum	Overall	33	45	64
Maximum	1	33	45	64
Maximum	2	33	45	64
Maximum	3	33	45	64
Maximum	Overall	33	45	64
SD	1	0.00	0.00	0.00
SD	2	0.00	0.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	0.00	0.00

Overall	Median	33	45	64
	Minimum	33	45	64
	Maximum	33	45	64
	SD	0.00	0.00	0.00

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	386	420	492
Median	2	386	420	492
Median	3	386	420	492
Median	Overall	386	420	492
Minimum	1	386	420	492
Minimum	2	386	420	492
Minimum	3	386	420	492
Minimum	Overall	386	420	492
Maximum	1	386	420	492
Maximum	2	386	420	492
Maximum	3	386	420	492
Maximum	Overall	386	420	492
SD	1	0.00	0.00	0.00
SD	2	0.00	0.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	0.00	0.00

Overall	Median	386	420	492
	Minimum	386	420	492
	Maximum	386	420	492
	SD	0.00	0.00	0.00

AIMS Bookmark Standard Setting May 2005 Grade 3
 Mathematics
 Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	33	45	64
2	33	45	64
3	33	45	64
Overall	33	45	64

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	9.5	18.5	51.1	20.9

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	18	37	59
1	2	12	24	51
1	3	18	40	64
1	4	10	26	57
2	5	11	15	57
2	6	22	32	52
2	7	19	34	61
2	8	19	30	51
3	9	22	31	50
3	10	18	42	61
3	11	13	27	51

Overall	Median	18	31	57
	Minimum	10	15	50
	Maximum	22	42	64
	SD	4.30	7.71	5.02

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	398	456	532
1	2	373	418	499
1	3	398	464	566
1	4	363	424	522
2	5	368	386	522
2	6	412	442	502
2	7	402	447	544
2	8	402	436	499
3	9	412	439	495
3	10	398	470	544
3	11	378	427	499

Overall	Median	398	439	522
	Minimum	363	386	495
	Maximum	412	470	566
	SD	17.54	23.54	23.85

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	15	31.5	58
Median	2	19	31	54.5
Median	3	18	31	51
Median	Overall	18	31	57
Minimum	1	10	24	51
Minimum	2	11	15	51
Minimum	3	13	27	50
Minimum	Overall	10	15	50
Maximum	1	18	40	64
Maximum	2	22	34	61
Maximum	3	22	42	61
Maximum	Overall	22	42	64
SD	1	4.12	7.93	5.38
SD	2	4.72	8.66	4.65
SD	3	4.51	7.77	6.08
SD	Overall	4.30	7.71	5.02

Overall	Median	18	31	57
	Minimum	10	15	50
	Maximum	22	42	64
	SD	4.30	7.71	5.02

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	386	440	527
Median	2	402	439	512
Median	3	398	439	499
Median	Overall	398	439	522
Minimum	1	363	418	499
Minimum	2	368	386	499
Minimum	3	378	427	495
Minimum	Overall	363	386	495
Maximum	1	398	464	566
Maximum	2	412	447	544
Maximum	3	412	470	544
Maximum	Overall	412	470	566
SD	1	17.80	22.88	27.84
SD	2	19.25	28.19	20.84
SD	3	17.09	22.19	27.21
SD	Overall	17.54	23.54	23.85

Overall	Median	398	439	522
	Minimum	363	386	495
	Maximum	412	470	566
	SD	17.54	23.54	23.85

AIMS Bookmark Standard Setting May 2005 Grade 5
 Mathematics
 Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	15	31.5	58
2	19	31	54.5
3	18	31	51
Overall	18	31	57

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	0.6	9.8	54.0	35.6

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	25	48	64
1	2	12	51	61
1	3	19	42	64
1	4	14	30	61
2	5	35	48	64
2	6	28	48	62
2	7	21	47	61
2	8	28	48	62
3	9	22	37	59
3	10	21	40	53
3	11	21	35	61

Overall	Median	21	47	61
	Minimum	12	30	53
	Maximum	35	51	64
	SD	6.52	6.77	3.11

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	421	489	566
1	2	373	499	544
1	3	402	470	566
1	4	382	436	544
2	5	450	489	566
2	6	430	489	550
2	7	409	485	544
2	8	430	489	550
3	9	412	456	532
3	10	409	464	506
3	11	409	450	544

Overall	Median	409	485	544
	Minimum	373	436	506
	Maximum	450	499	566
	SD	21.72	20.26	17.44

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	16.5	45	62.5
Median	2	28	48	62
Median	3	21	37	59
Median	Overall	21	47	61
Minimum	1	12	30	61
Minimum	2	21	47	61
Minimum	3	21	35	53
Minimum	Overall	12	30	53
Maximum	1	25	51	64
Maximum	2	35	48	64
Maximum	3	22	40	61
Maximum	Overall	35	51	64
SD	1	5.80	9.29	1.73
SD	2	5.72	0.50	1.26
SD	3	0.58	2.52	4.16
SD	Overall	6.52	6.77	3.11

Overall	Median	21	47	61
	Minimum	12	30	53
	Maximum	35	51	64
	SD	6.52	6.77	3.11

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	392	480	555
Median	2	430	489	550
Median	3	409	456	532
Median	Overall	409	485	544
Minimum	1	373	436	544
Minimum	2	409	485	544
Minimum	3	409	450	506
Minimum	Overall	373	436	506
Maximum	1	421	499	566
Maximum	2	450	489	566
Maximum	3	412	464	544
Maximum	Overall	450	499	566
SD	1	21.42	27.74	12.70
SD	2	16.74	2.00	9.43
SD	3	1.73	7.02	19.43
SD	Overall	21.72	20.26	17.44

Overall	Median	409	485	544
	Minimum	373	436	506
	Maximum	450	499	566
	SD	21.72	20.26	17.44

AIMS Bookmark Standard Setting May 2005 Grade 5
 Mathematics
 Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	16.5	45	62.5
2	28	48	62
3	21	37	59
Overall	21	47	61

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	1.7	35.7	40.0	22.6

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	25	45	64
1	2	29	51	61
1	3	22	44	66
1	4	23	40	60
2	5	26	42	62
2	6	28	44	62
2	7	26	39	65
2	8	28	45	62
3	9	25	42	61
3	10	22	40	62
3	11	22	41	61

Overall	Median	25	42	62
	Minimum	22	39	60
	Maximum	29	51	66
	SD	2.59	3.38	1.86

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	421	479	566
1	2	433	499	544
1	3	412	476	589
1	4	415	464	538
2	5	424	470	550
2	6	430	476	550
2	7	424	462	576
2	8	430	479	550
3	9	421	470	544
3	10	412	464	550
3	11	412	467	544

Overall	Median	421	470	550
	Minimum	412	462	538
	Maximum	433	499	589
	SD	7.76	10.50	15.71

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	24	44.5	62.5
Median	2	27	43	62
Median	3	22	41	61
Median	Overall	25	42	62
Minimum	1	22	40	60
Minimum	2	26	39	62
Minimum	3	22	40	61
Minimum	Overall	22	39	60
Maximum	1	29	51	66
Maximum	2	28	45	65
Maximum	3	25	42	62
Maximum	Overall	29	51	66
SD	1	3.10	4.55	2.75
SD	2	1.15	2.65	1.50
SD	3	1.73	1.00	0.58
SD	Overall	2.59	3.38	1.86

Overall	Median	25	42	62
	Minimum	22	39	60
	Maximum	29	51	66
	SD	2.59	3.38	1.86

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	418	478	555
Median	2	427	473	550
Median	3	412	467	544
Median	Overall	421	470	550
Minimum	1	412	464	538
Minimum	2	424	462	550
Minimum	3	412	464	544
Minimum	Overall	412	462	538
Maximum	1	433	499	589
Maximum	2	430	479	576
Maximum	3	421	470	550
Maximum	Overall	433	499	589
SD	1	9.29	14.53	23.20
SD	2	3.46	7.50	13.00
SD	3	5.20	3.00	3.46
SD	Overall	7.76	10.50	15.71

Overall	Median	421	470	550
	Minimum	412	462	538
	Maximum	433	499	589
	SD	7.76	10.50	15.71

AIMS Bookmark Standard Setting May 2005 Grade 5
 Mathematics
 Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	24	44.5	62.5
2	27	43	62
3	22	41	61
Overall	25	42	62

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	4.2	22.7	53.4	19.7

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	28	45	64
1	2	29	52	61
1	3	24	48	66
1	4	25	42	62
2	5	27	44	62
2	6	28	44	62
2	7	28	44	65
2	8	28	45	62
3	9	28	42	61
3	10	23	42	62
3	11	26	43	64

Overall	Median	28	44	62
	Minimum	23	42	61
	Maximum	29	52	66
	SD	1.95	3.01	1.66

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	430	479	566
1	2	433	502	544
1	3	418	489	589
1	4	421	470	550
2	5	427	476	550
2	6	430	476	550
2	7	430	476	576
2	8	430	479	550
3	9	430	470	544
3	10	415	470	550
3	11	424	473	566

Overall	Median	430	476	550
	Minimum	415	470	544
	Maximum	433	502	589
	SD	5.86	9.63	14.57

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	26.5	46.5	63
Median	2	28	44	62
Median	3	26	42	62
Median	Overall	28	44	62
Minimum	1	24	42	61
Minimum	2	27	44	62
Minimum	3	23	42	61
Minimum	Overall	23	42	61
Maximum	1	29	52	66
Maximum	2	28	45	65
Maximum	3	28	43	64
Maximum	Overall	29	52	66
SD	1	2.38	4.27	2.22
SD	2	0.50	0.50	1.50
SD	3	2.52	0.58	1.53
SD	Overall	1.95	3.01	1.66

Overall	Median	28	44	62
	Minimum	23	42	61
	Maximum	29	52	66
	SD	1.95	3.01	1.66

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	426	484	558
Median	2	430	476	550
Median	3	424	470	550
Median	Overall	430	476	550
Minimum	1	418	470	544
Minimum	2	427	476	550
Minimum	3	415	470	544
Minimum	Overall	415	470	544
Maximum	1	433	502	589
Maximum	2	430	479	576
Maximum	3	430	473	566
Maximum	Overall	433	502	589
SD	1	7.14	13.74	20.11
SD	2	1.50	1.50	13.00
SD	3	7.55	1.73	11.37
SD	Overall	5.86	9.63	14.57

Overall	Median	430	476	550
	Minimum	415	470	544
	Maximum	433	502	589
	SD	5.86	9.63	14.57

AIMS Bookmark Standard Setting May 2005 Grade 5
 Mathematics
 Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	26.5	46.5	63
2	28	44	62
3	26	42	62
Overall	28	44	62

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	7.4	23.3	49.7	19.6

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	10	23	56
1	3	20	39	57
1	4	29	47	57
1	5	25	41	60
2	6	35	57	62
2	7	21	36	62
2	8	20	34	57
2	9	21	37	57
3	10	5	19	32
3	11	19	39	50
3	12	9	27	57
3	13	20	43	57

Overall	Median	20	38	57
	Minimum	5	19	32
	Maximum	35	57	62
	SD	8.40	10.40	7.98

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	405	466	595
1	3	455	522	601
1	4	488	552	601
1	5	474	529	623
2	6	508	601	643
2	7	459	512	643
2	8	455	505	601
2	9	459	515	601
3	10	359	451	498
3	11	451	522	565
3	12	398	481	601
3	13	455	537	601

Overall	Median	455	519	601
	Minimum	359	451	498
	Maximum	508	601	643
	SD	41.05	39.65	37.93

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	22.5	40	57
Median	2	21	36.5	59.5
Median	3	14	33	53.5
Median	Overall	20	38	57
Minimum	1	10	23	56
Minimum	2	20	34	57
Minimum	3	5	19	32
Minimum	Overall	5	19	32
Maximum	1	29	47	60
Maximum	2	35	57	62
Maximum	3	20	43	57
Maximum	Overall	35	57	62
SD	1	8.21	10.25	1.73
SD	2	7.18	10.74	2.89
SD	3	7.41	11.02	11.80
SD	Overall	8.40	10.40	7.98

Overall	Median	20	38	57
	Minimum	5	19	32
	Maximum	35	57	62
	SD	8.40	10.40	7.98

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	465	526	601
Median	2	459	514	622
Median	3	425	502	583
Median	Overall	455	519	601
Minimum	1	405	466	595
Minimum	2	455	505	601
Minimum	3	359	451	498
Minimum	Overall	359	451	498
Maximum	1	488	552	623
Maximum	2	508	601	643
Maximum	3	455	537	601
Maximum	Overall	508	601	643
SD	1	36.28	36.49	12.33
SD	2	25.24	45.36	24.25
SD	3	45.89	39.14	48.56
SD	Overall	41.05	39.65	37.93

Overall	Median	455	519	601
	Minimum	359	451	498
	Maximum	508	601	643
	SD	41.05	39.65	37.93

AIMS Bookmark Standard Setting May 2005 Grade 8
 Mathematics
 Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	22.5	40	57
2	21	36.5	59.5
3	14	33	53.5
Overall	20	38	57

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	1.6	22.2	53.3	22.9

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	29	38	59
1	3	26	43	58
1	4	27	47	60
1	5	27	38	60
2	6	25	39	63
2	7	24	38	63
2	8	24	38	63
2	9	24	38	63
3	10	18	35	51
3	11	12	29	42
3	12	17	35	57
3	13	20	42	57

Overall	Median	24	38	59.5
	Minimum	12	29	42
	Maximum	29	47	63
	SD	4.99	4.48	6.15

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	488	519	615
1	3	477	537	608
1	4	481	552	623
1	5	481	519	623
2	6	474	522	655
2	7	470	519	655
2	8	470	519	655
2	9	470	519	655
3	10	446	508	569
3	11	417	488	533
3	12	442	508	601
3	13	455	533	601

Overall	Median	470	519	615
	Minimum	417	488	533
	Maximum	488	552	655
	SD	20.51	15.96	37.89

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	27	40.5	59.5
Median	2	24	38	63
Median	3	17.5	35	54
Median	Overall	24	38	59.5
Minimum	1	26	38	58
Minimum	2	24	38	63
Minimum	3	12	29	42
Minimum	Overall	12	29	42
Maximum	1	29	47	60
Maximum	2	25	39	63
Maximum	3	20	42	57
Maximum	Overall	29	47	63
SD	1	1.26	4.36	0.96
SD	2	0.50	0.50	0.00
SD	3	3.40	5.32	7.09
SD	Overall	4.99	4.48	6.15

Overall	Median	24	38	59.5
	Minimum	12	29	42
	Maximum	29	47	63
	SD	4.99	4.48	6.15

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	481	528	619
Median	2	470	519	655
Median	3	444	508	585
Median	Overall	470	519	615
Minimum	1	477	519	608
Minimum	2	470	519	655
Minimum	3	417	488	533
Minimum	Overall	417	488	533
Maximum	1	488	552	623
Maximum	2	474	522	655
Maximum	3	455	533	601
Maximum	Overall	488	552	655
SD	1	4.57	15.95	7.23
SD	2	2.00	1.50	0.00
SD	3	16.27	18.43	32.39
SD	Overall	20.51	15.96	37.89

Overall	Median	470	519	615
	Minimum	417	488	533
	Maximum	488	552	655
	SD	20.51	15.96	37.89

AIMS Bookmark Standard Setting May 2005 Grade 8
 Mathematics
 Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	27	40.5	59.5
2	24	38	63
3	17.5	35	54
Overall	24	38	59.5

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	4.3	19.5	59.9	16.3

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	26	43	59
1	3	26	43	58
1	4	29	45	60
1	5	27	43	60
2	6	25	41	63
2	7	24	43	60
2	8	24	45	63
2	9	24	40	60
3	10	33	42	56
3	11	19	42	58
3	12	21	43	57
3	13	29	43	60

Overall	Median	25.5	43	60
	Minimum	19	40	56
	Maximum	33	45	63
	SD	3.73	1.42	2.11

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	477	537	615
1	3	477	537	608
1	4	488	544	623
1	5	481	537	623
2	6	474	529	655
2	7	470	537	623
2	8	470	544	655
2	9	470	526	623
3	10	501	533	595
3	11	451	533	608
3	12	459	537	601
3	13	488	537	623

Overall	Median	474	537	623
	Minimum	451	526	595
	Maximum	501	544	655
	SD	13.36	5.23	18.54

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	26.5	43	59.5
Median	2	24	42	61.5
Median	3	25	42.5	57.5
Median	Overall	25.5	43	60
Minimum	1	26	43	58
Minimum	2	24	40	60
Minimum	3	19	42	56
Minimum	Overall	19	40	56
Maximum	1	29	45	60
Maximum	2	25	45	63
Maximum	3	33	43	60
Maximum	Overall	33	45	63
SD	1	1.41	1.00	0.96
SD	2	0.50	2.22	1.73
SD	3	6.61	0.58	1.71
SD	Overall	3.73	1.42	2.11

Overall	Median	25.5	43	60
	Minimum	19	40	56
	Maximum	33	45	63
	SD	3.73	1.42	2.11

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	479	537	619
Median	2	470	533	639
Median	3	474	535	605
Median	Overall	474	537	623
Minimum	1	477	537	608
Minimum	2	470	526	623
Minimum	3	451	533	595
Minimum	Overall	451	526	595
Maximum	1	488	544	623
Maximum	2	474	544	655
Maximum	3	501	537	623
Maximum	Overall	501	544	655
SD	1	5.19	3.50	7.23
SD	2	2.00	8.12	18.48
SD	3	23.64	2.31	12.07
SD	Overall	13.36	5.23	18.54

Overall	Median	474	537	623
	Minimum	451	526	595
	Maximum	501	544	655
	SD	13.36	5.23	18.54

AIMS Bookmark Standard Setting May 2005 Grade 8
 Mathematics
 Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	26.5	43	59.5
2	24	42	61.5
3	25	42.5	57.5
Overall	25.5	43	60

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	5.1	30.6	50.7	13.6

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	2	30	49	60
1	3	31	47	59
1	4	30	47	60
1	5	31	47	61
2	6	30	48	63
2	7	30	50	63
2	8	30	50	63
2	9	30	47	60
3	10	33	50	59
3	12	29	48	59
3	13	30	47	60

Overall	Median	30	48	60
	Minimum	29	47	59
	Maximum	33	50	63
	SD	1.03	1.33	1.63

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	2	491	561	623
1	3	495	552	615
1	4	491	552	623
1	5	495	552	632
2	6	491	556	655
2	7	491	565	655
2	8	491	565	655
2	9	491	552	623
3	10	501	565	615
3	12	488	556	615
3	13	491	552	623

Overall	Median	491	556	623
	Minimum	488	552	615
	Maximum	501	565	655
	SD	3.47	5.79	16.58

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	30.5	47	60
Median	2	30	49	63
Median	3	30	48	59
Median	Overall	30	48	60
Minimum	1	30	47	59
Minimum	2	30	47	60
Minimum	3	29	47	59
Minimum	Overall	29	47	59
Maximum	1	31	49	61
Maximum	2	30	50	63
Maximum	3	33	50	60
Maximum	Overall	33	50	63
SD	1	0.58	1.00	0.82
SD	2	0.00	1.50	1.50
SD	3	2.08	1.53	0.58
SD	Overall	1.03	1.33	1.63

Overall	Median	30	48	60
	Minimum	29	47	59
	Maximum	33	50	63
	SD	1.03	1.33	1.63

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	493	552	623
Median	2	491	561	655
Median	3	491	556	615
Median	Overall	491	556	623
Minimum	1	491	552	615
Minimum	2	491	552	623
Minimum	3	488	552	615
Minimum	Overall	488	552	615
Maximum	1	495	561	632
Maximum	2	491	565	655
Maximum	3	501	565	623
Maximum	Overall	501	565	655
SD	1	2.31	4.50	6.95
SD	2	0.00	6.56	16.00
SD	3	6.81	6.66	4.62
SD	Overall	3.47	5.79	16.58

Overall	Median	491	556	623
	Minimum	488	552	615
	Maximum	501	565	655
	SD	3.47	5.79	16.58

AIMS Bookmark Standard Setting May 2005 Grade 8
 Mathematics
 Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	30.5	47	60
2	30	49	63
3	30	48	59
Overall	30	48	60

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	10.6	38.5	37.3	13.6

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	17	36	68
1	2	34	59	75
1	3	39	58	73
1	4	40	51	76
2	8	53	59	68
2	9	44	58	67
2	11	45	58	75
2	12	30	52	75
3	5	42	51	71
3	6	32	47	81
3	7	35	58	74
3	10	20	34	78

Overall	Median	37	55	74.5
	Minimum	17	34	67
	Maximum	53	59	81
	SD	10.31	8.78	4.25

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	608	652	719
1	2	648	697	741
1	3	658	695	734
1	4	660	681	745
2	8	685	697	719
2	9	668	695	716
2	11	670	695	741
2	12	640	683	741
3	5	664	681	728
3	6	644	673	773
3	7	650	695	738
3	10	616	648	755

Overall	Median	654	689	738
	Minimum	608	648	716
	Maximum	685	697	773
	SD	22.07	17.22	16.26

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	36.5	54.5	74
Median	2	44.5	58	71.5
Median	3	33.5	49	76
Median	Overall	37	55	74.5
Minimum	1	17	36	68
Minimum	2	30	52	67
Minimum	3	20	34	71
Minimum	Overall	17	34	67
Maximum	1	40	59	76
Maximum	2	53	59	75
Maximum	3	42	58	81
Maximum	Overall	53	59	81
SD	1	10.66	10.61	3.56
SD	2	9.56	3.20	4.35
SD	3	9.18	10.08	4.40
SD	Overall	10.31	8.78	4.25

Overall	Median	37	55	74.5
	Minimum	17	34	67
	Maximum	53	59	81
	SD	10.31	8.78	4.25

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	653	688	738
Median	2	669	695	730
Median	3	647	677	747
Median	Overall	654	689	738
Minimum	1	608	652	719
Minimum	2	640	683	716
Minimum	3	616	648	728
Minimum	Overall	608	648	716
Maximum	1	660	697	745
Maximum	2	685	697	741
Maximum	3	664	695	773
Maximum	Overall	685	697	773
SD	1	24.24	20.76	11.44
SD	2	18.77	6.40	13.62
SD	3	20.16	19.72	19.77
SD	Overall	22.07	17.22	16.26

Overall	Median	654	689	738
	Minimum	608	648	716
	Maximum	685	697	773
	SD	22.07	17.22	16.26

AIMS Bookmark Standard Setting May 2005 High School
Mathematics
Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	36.5	54.5	74
2	44.5	58	71.5
3	33.5	49	76
Overall	37	55	74.5

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	14.1	27.8	39.5	18.6
G10	13.1	25.0	37.8	24.1
G11	16.6	34.5	43.4	5.5

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	35	52	78
1	2	40	55	78
1	3	39	56	72
1	4	40	55	76
2	8	51	55	74
2	9	43	55	75
2	11	45	55	75
2	12	40	54	75
3	5	33	43	75
3	6	32	46	80
3	7	32	48	76
3	10	32	43	82

Overall	Median	39.5	54.5	75.5
	Minimum	32	43	72
	Maximum	51	56	82
	SD	5.99	5.00	2.74

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	650	683	755
1	2	660	689	755
1	3	658	691	731
1	4	660	689	745
2	8	681	689	738
2	9	666	689	741
2	11	670	689	741
2	12	660	687	741
3	5	646	666	741
3	6	644	672	766
3	7	644	675	745
3	10	644	666	782

Overall	Median	658	687	741
	Minimum	644	666	731
	Maximum	681	691	782
	SD	11.80	9.60	14.07

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	39.5	55	77
Median	2	44	55	75
Median	3	32	44.5	78
Median	Overall	39.5	54.5	75.5
Minimum	1	35	52	72
Minimum	2	40	54	74
Minimum	3	32	43	75
Minimum	Overall	32	43	72
Maximum	1	40	56	78
Maximum	2	51	55	75
Maximum	3	33	48	82
Maximum	Overall	51	56	82
SD	1	2.38	1.73	2.83
SD	2	4.65	0.50	0.50
SD	3	0.50	2.45	3.30
SD	Overall	5.99	5.00	2.74

Overall	Median	39.5	54.5	75.5
	Minimum	32	43	72
	Maximum	51	56	82
	SD	5.99	5.00	2.74

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	659	689	750
Median	2	668	689	741
Median	3	644	669	756
Median	Overall	658	687	741
Minimum	1	650	683	731
Minimum	2	660	687	738
Minimum	3	644	666	741
Minimum	Overall	644	666	731
Maximum	1	660	691	755
Maximum	2	681	689	741
Maximum	3	646	675	782
Maximum	Overall	681	691	782
SD	1	4.76	3.46	11.36
SD	2	8.85	1.00	1.50
SD	3	1.00	4.50	19.12
SD	Overall	11.80	9.60	14.07

Overall	Median	658	687	741
	Minimum	644	666	731
	Maximum	681	691	782
	SD	11.80	9.60	14.07

AIMS Bookmark Standard Setting May 2005 High School
Mathematics
Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	39.5	55	77
2	44	55	75
3	32	44.5	78
Overall	39.5	54.5	75.5

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	16.6	23.4	43.1	16.9
G10	15.4	21.1	41.5	22.0
G11	19.6	29.0	46.9	4.5

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	44	52	78
1	2	44	52	78
1	3	44	52	78
1	4	44	55	78
2	8	44	55	78
2	9	44	52	78
2	11	44	52	78
2	12	44	52	78
3	5	44	52	78
3	6	44	52	78
3	7	44	52	78
3	10	44	52	78

Overall	Median	44	52	78
	Minimum	44	52	78
	Maximum	44	55	78
	SD	0.00	1.17	0.00

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	668	683	755
1	2	668	683	755
1	3	668	683	755
1	4	668	689	755
2	8	668	689	755
2	9	668	683	755
2	11	668	683	755
2	12	668	683	755
3	5	668	683	755
3	6	668	683	755
3	7	668	683	755
3	10	668	683	755

Overall	Median	668	683	755
	Minimum	668	683	755
	Maximum	668	689	755
	SD	0.00	2.34	0.00

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	44	52	78
Median	2	44	52	78
Median	3	44	52	78
Median	Overall	44	52	78
Minimum	1	44	52	78
Minimum	2	44	52	78
Minimum	3	44	52	78
Minimum	Overall	44	52	78
Maximum	1	44	55	78
Maximum	2	44	55	78
Maximum	3	44	52	78
Maximum	Overall	44	55	78
SD	1	0.00	1.50	0.00
SD	2	0.00	1.50	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	1.17	0.00

Overall	Median	44	52	78
	Minimum	44	52	78
	Maximum	44	55	78
	SD	0.00	1.17	0.00

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	668	683	755
Median	2	668	683	755
Median	3	668	683	755
Median	Overall	668	683	755
Minimum	1	668	683	755
Minimum	2	668	683	755
Minimum	3	668	683	755
Minimum	Overall	668	683	755
Maximum	1	668	689	755
Maximum	2	668	689	755
Maximum	3	668	683	755
Maximum	Overall	668	689	755
SD	1	0.00	3.00	0.00
SD	2	0.00	3.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	2.34	0.00

Overall	Median	668	683	755
	Minimum	668	683	755
	Maximum	668	689	755
	SD	0.00	2.34	0.00

AIMS Bookmark Standard Setting May 2005 High School
Mathematics
Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	44	52	78
2	44	52	78
3	44	52	78
Overall	44	52	78

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	23.5	12.9	52.3	11.3
G10	21.7	11.7	51.6	15.0
G11	27.9	16.0	53.9	2.2

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	1	44	52	77
1	3	44	52	77
1	4	44	52	77
2	8	44	55	77
2	9	44	52	77
2	11	44	52	77
2	32	44	52	77
3	5	44	52	77
3	6	44	52	77
3	7	44	52	77
3	10	44	52	77

Overall	Median	44	52	77
	Minimum	44	52	77
	Maximum	44	55	77
	SD	0.00	0.90	0.00

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	1	668	683	750
1	3	668	683	750
1	4	668	683	750
2	8	668	689	750
2	9	668	683	750
2	11	668	683	750
2	32	668	683	750
3	5	668	683	750
3	6	668	683	750
3	7	668	683	750
3	10	668	683	750

Overall	Median	668	683	750
	Minimum	668	683	750
	Maximum	668	689	750
	SD	0.00	1.81	0.00

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	44	52	77
Median	2	44	52	77
Median	3	44	52	77
Median	Overall	44	52	77
Minimum	1	44	52	77
Minimum	2	44	52	77
Minimum	3	44	52	77
Minimum	Overall	44	52	77
Maximum	1	44	52	77
Maximum	2	44	55	77
Maximum	3	44	52	77
Maximum	Overall	44	55	77
SD	1	0.00	0.00	0.00
SD	2	0.00	1.50	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	0.90	0.00

Overall	Median	44	52	77
	Minimum	44	52	77
	Maximum	44	55	77
	SD	0.00	0.90	0.00

AIMS Bookmark Standard Setting May 2005 High School Mathematics
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	668	683	750
Median	2	668	683	750
Median	3	668	683	750
Median	Overall	668	683	750
Minimum	1	668	683	750
Minimum	2	668	683	750
Minimum	3	668	683	750
Minimum	Overall	668	683	750
Maximum	1	668	683	750
Maximum	2	668	689	750
Maximum	3	668	683	750
Maximum	Overall	668	689	750
SD	1	0.00	0.00	0.00
SD	2	0.00	3.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	1.81	0.00

Overall	Median	668	683	750
	Minimum	668	683	750
	Maximum	668	689	750
	SD	0.00	1.81	0.00

AIMS Bookmark Standard Setting May 2005 High School
Mathematics
Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	44	52	77
2	44	52	77
3	44	52	77
Overall	44	52	77

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	23.5	12.9	50.5	13.1
G10	21.7	11.7	49.4	17.2
G11	27.9	16.0	53.3	2.8

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	7	7	20	33
1	8	14	24	48
1	32	14	30	39
2	2	6	22	32
2	5	19	38	49
2	6	32	40	49
2	12	24	40	47
3	3	20	32	49
3	4	11	27	46
3	10	13	25	37
3	11	12	20	46

Overall	Median	14	27	46
	Minimum	6	20	32
	Maximum	32	40	49
	SD	7.63	7.67	6.63

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	7	309	379	427
1	8	353	395	499
1	32	353	416	451
2	2	300	387	424
2	5	375	447	507
2	6	424	455	507
2	12	395	455	492
3	3	379	424	507
3	4	337	406	486
3	10	348	398	443
3	11	343	379	486

Overall	Median	353	406	486
	Minimum	300	379	424
	Maximum	424	455	507
	SD	36.04	28.98	32.68

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	14	24	39
Median	2	21.5	39	48
Median	3	12.5	26	46
Median	Overall	14	27	46
Minimum	1	7	20	33
Minimum	2	6	22	32
Minimum	3	11	20	37
Minimum	Overall	6	20	32
Maximum	1	14	30	48
Maximum	2	32	40	49
Maximum	3	20	32	49
Maximum	Overall	32	40	49
SD	1	4.04	5.03	7.55
SD	2	10.90	8.72	8.22
SD	3	4.08	4.97	5.20
SD	Overall	7.63	7.67	6.63

Overall	Median	14	27	46
	Minimum	6	20	32
	Maximum	32	40	49
	SD	7.63	7.67	6.63

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	353	395	451
Median	2	385	451	500
Median	3	346	402	486
Median	Overall	353	406	486
Minimum	1	309	379	427
Minimum	2	300	387	424
Minimum	3	337	379	443
Minimum	Overall	300	379	424
Maximum	1	353	416	499
Maximum	2	424	455	507
Maximum	3	379	424	507
Maximum	Overall	424	455	507
SD	1	25.40	18.56	36.66
SD	2	52.97	32.88	39.64
SD	3	18.71	18.66	26.89
SD	Overall	36.04	28.98	32.68

Overall	Median	353	406	486
	Minimum	300	379	424
	Maximum	424	455	507
	SD	36.04	28.98	32.68

AIMS Bookmark Standard Setting May 2005 Grade 3
Reading
Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	14	24	39
2	21.5	39	48
3	12.5	26	46
Overall	14	27	46

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	2.0	17.1	54.0	26.9

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	7	14	27	39
1	8	14	28	39
1	32	14	28	39
2	2	22	35	48
2	5	22	35	48
2	6	22	35	48
2	12	22	35	48
3	3	20	34	51
3	4	20	34	51
3	10	20	34	51
3	11	20	34	51

Overall	Median	20	34	48
	Minimum	14	27	39
	Maximum	22	35	51
	SD	3.39	3.23	5.08

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	7	353	406	451
1	8	353	409	451
1	32	353	409	451
2	2	387	435	499
2	5	387	435	499
2	6	387	435	499
2	12	387	435	499
3	3	379	431	527
3	4	379	431	527
3	10	379	431	527
3	11	379	431	527

Overall	Median	379	431	499
	Minimum	353	406	451
	Maximum	387	435	527
	SD	14.46	11.84	31.55

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	14	28	39
Median	2	22	35	48
Median	3	20	34	51
Median	Overall	20	34	48
Minimum	1	14	27	39
Minimum	2	22	35	48
Minimum	3	20	34	51
Minimum	Overall	14	27	39
Maximum	1	14	28	39
Maximum	2	22	35	48
Maximum	3	20	34	51
Maximum	Overall	22	35	51
SD	1	0.00	0.58	0.00
SD	2	0.00	0.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	3.39	3.23	5.08

Overall	Median	20	34	48
	Minimum	14	27	39
	Maximum	22	35	51
	SD	3.39	3.23	5.08

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	353	409	451
Median	2	387	435	499
Median	3	379	431	527
Median	Overall	379	431	499
Minimum	1	353	406	451
Minimum	2	387	435	499
Minimum	3	379	431	527
Minimum	Overall	353	406	451
Maximum	1	353	409	451
Maximum	2	387	435	499
Maximum	3	379	431	527
Maximum	Overall	387	435	527
SD	1	0.00	1.73	0.00
SD	2	0.00	0.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	14.46	11.84	31.55

Overall	Median	379	431	499
	Minimum	353	406	451
	Maximum	387	435	527
	SD	14.46	11.84	31.55

AIMS Bookmark Standard Setting May 2005 Grade 3
Reading
Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	14	28	39
2	22	35	48
3	20	34	51
Overall	20	34	48

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	8.7	24.8	47.5	19.0

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	7	19	35	45
1	8	20	34	49
1	32	20	34	50
2	2	20	34	50
2	5	20	34	50
2	6	20	35	50
2	12	20	34	50
3	3	20	34	51
3	4	20	34	51
3	10	20	34	51
3	11	20	34	51

Overall	Median	20	34	50
	Minimum	19	34	45
	Maximum	20	35	51
	SD	0.30	0.40	1.72

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	7	375	435	480
1	8	379	431	507
1	32	379	431	516
2	2	379	431	516
2	5	379	431	516
2	6	379	435	516
2	12	379	431	516
3	3	379	431	527
3	4	379	431	527
3	10	379	431	527
3	11	379	431	527

Overall	Median	379	431	516
	Minimum	375	431	480
	Maximum	379	435	527
	SD	1.21	1.62	13.64

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	20	34	49
Median	2	20	34	50
Median	3	20	34	51
Median	Overall	20	34	50
Minimum	1	19	34	45
Minimum	2	20	34	50
Minimum	3	20	34	51
Minimum	Overall	19	34	45
Maximum	1	20	35	50
Maximum	2	20	35	50
Maximum	3	20	34	51
Maximum	Overall	20	35	51
SD	1	0.58	0.58	2.65
SD	2	0.00	0.50	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.30	0.40	1.72

Overall	Median	20	34	50
	Minimum	19	34	45
	Maximum	20	35	51
	SD	0.30	0.40	1.72

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	379	431	507
Median	2	379	431	516
Median	3	379	431	527
Median	Overall	379	431	516
Minimum	1	375	431	480
Minimum	2	379	431	516
Minimum	3	379	431	527
Minimum	Overall	375	431	480
Maximum	1	379	435	516
Maximum	2	379	435	516
Maximum	3	379	431	527
Maximum	Overall	379	435	527
SD	1	2.31	2.31	18.73
SD	2	0.00	2.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	1.21	1.62	13.64

Overall	Median	379	431	516
	Minimum	375	431	480
	Maximum	379	435	527
	SD	1.21	1.62	13.64

AIMS Bookmark Standard Setting May 2005 Grade 3
Reading
Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	20	34	49
2	20	34	50
3	20	34	51
Overall	20	34	50

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	8.7	24.8	56.2	10.3

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	7	20	35	45
1	8	20	34	49
1	32	20	35	50
2	2	20	34	50
2	5	20	34	50
2	6	20	35	50
2	12	20	34	50
3	3	20	34	51
3	4	20	34	51
3	10	20	34	51
3	11	20	34	51

Overall	Median	20	34	50
	Minimum	20	34	45
	Maximum	20	35	51
	SD	0.00	0.47	1.72

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	7	379	435	480
1	8	379	431	507
1	32	379	435	516
2	2	379	431	516
2	5	379	431	516
2	6	379	435	516
2	12	379	431	516
3	3	379	431	527
3	4	379	431	527
3	10	379	431	527
3	11	379	431	527

Overall	Median	379	431	516
	Minimum	379	431	480
	Maximum	379	435	527
	SD	0.00	1.87	13.64

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	20	35	49
Median	2	20	34	50
Median	3	20	34	51
Median	Overall	20	34	50
Minimum	1	20	34	45
Minimum	2	20	34	50
Minimum	3	20	34	51
Minimum	Overall	20	34	45
Maximum	1	20	35	50
Maximum	2	20	35	50
Maximum	3	20	34	51
Maximum	Overall	20	35	51
SD	1	0.00	0.58	2.65
SD	2	0.00	0.50	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	0.47	1.72

Overall	Median	20	34	50
	Minimum	20	34	45
	Maximum	20	35	51
	SD	0.00	0.47	1.72

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	379	435	507
Median	2	379	431	516
Median	3	379	431	527
Median	Overall	379	431	516
Minimum	1	379	431	480
Minimum	2	379	431	516
Minimum	3	379	431	527
Minimum	Overall	379	431	480
Maximum	1	379	435	516
Maximum	2	379	435	516
Maximum	3	379	431	527
Maximum	Overall	379	435	527
SD	1	0.00	2.31	18.73
SD	2	0.00	2.00	0.00
SD	3	0.00	0.00	0.00
SD	Overall	0.00	1.87	13.64

Overall	Median	379	431	516
	Minimum	379	431	480
	Maximum	379	435	527
	SD	0.00	1.87	13.64

AIMS Bookmark Standard Setting May 2005 Grade 3
Reading
Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	20	35	49
2	20	34	50
3	20	34	51
Overall	20	34	50

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	8.7	24.8	56.2	10.3

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	9	9	23	33
1	11	13	24	45
1	12	12	25	41
1	32	7	17	40
2	6	11	24	43
2	7	15	23	50
2	8	10	21	45
3	2	9	38	52
3	3	6	23	38
3	4	8	31	45
3	5	8	17	34

Overall	Median	9	23	43
	Minimum	6	17	33
	Maximum	15	38	52
	SD	2.71	5.96	5.97

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	9	371	431	464
1	11	392	434	512
1	12	387	438	494
1	32	356	409	489
2	6	382	434	502
2	7	401	431	545
2	8	377	424	512
3	2	371	482	568
3	3	348	431	482
3	4	364	457	512
3	5	364	409	468

Overall	Median	371	431	502
	Minimum	348	409	464
	Maximum	401	482	568
	SD	15.85	20.55	31.11

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	10.5	23.5	40.5
Median	2	11	23	45
Median	3	8	27	41.5
Median	Overall	9	23	43
Minimum	1	7	17	33
Minimum	2	10	21	43
Minimum	3	6	17	34
Minimum	Overall	6	17	33
Maximum	1	13	25	45
Maximum	2	15	24	50
Maximum	3	9	38	52
Maximum	Overall	15	38	52
SD	1	2.75	3.59	4.99
SD	2	2.65	1.53	3.61
SD	3	1.26	9.18	7.93
SD	Overall	2.71	5.96	5.97

Overall	Median	9	23	43
	Minimum	6	17	33
	Maximum	15	38	52
	SD	2.71	5.96	5.97

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	379	433	492
Median	2	382	431	512
Median	3	364	444	497
Median	Overall	371	431	502
Minimum	1	356	409	464
Minimum	2	377	424	502
Minimum	3	348	409	468
Minimum	Overall	348	409	464
Maximum	1	392	438	512
Maximum	2	401	434	545
Maximum	3	371	482	568
Maximum	Overall	401	482	568
SD	1	16.34	12.99	19.81
SD	2	12.66	5.13	22.50
SD	3	9.74	31.65	44.31
SD	Overall	15.85	20.55	31.11

Overall	Median	371	431	502
	Minimum	348	409	464
	Maximum	401	482	568
	SD	15.85	20.55	31.11

AIMS Bookmark Standard Setting May 2005 Grade 5
Reading
Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	10.5	23.5	40.5
2	11	23	45
3	8	27	41.5
Overall	9	23	43

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	0.1	12.3	46.5	41.1

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	9	9	21	45
1	11	11	24	49
1	12	9	24	45
1	32	9	20	42
2	6	23	34	51
2	7	21	36	52
2	8	24	40	52
3	2	9	38	47
3	3	9	24	45
3	4	8	31	45
3	5	10	25	40

Overall	Median	9	25	45
	Minimum	8	20	40
	Maximum	24	40	52
	SD	6.35	7.18	3.98

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	9	371	424	512
1	11	382	434	537
1	12	371	434	512
1	32	371	421	498
2	6	431	468	556
2	7	424	474	568
2	8	434	489	568
3	2	371	482	523
3	3	371	434	512
3	4	364	457	512
3	5	377	438	489

Overall	Median	371	438	512
	Minimum	364	421	489
	Maximum	434	489	568
	SD	27.27	24.33	27.38

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	9	22.5	45
Median	2	23	36	52
Median	3	9	28	45
Median	Overall	9	25	45
Minimum	1	9	20	42
Minimum	2	21	34	51
Minimum	3	8	24	40
Minimum	Overall	8	20	40
Maximum	1	11	24	49
Maximum	2	24	40	52
Maximum	3	10	38	47
Maximum	Overall	24	40	52
SD	1	1.00	2.06	2.87
SD	2	1.53	3.06	0.58
SD	3	0.82	6.45	2.99
SD	Overall	6.35	7.18	3.98

Overall	Median	9	25	45
	Minimum	8	20	40
	Maximum	24	40	52
	SD	6.35	7.18	3.98

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	371	429	512
Median	2	431	474	568
Median	3	371	448	512
Median	Overall	371	438	512
Minimum	1	371	421	498
Minimum	2	424	468	556
Minimum	3	364	434	489
Minimum	Overall	364	421	489
Maximum	1	382	434	537
Maximum	2	434	489	568
Maximum	3	377	482	523
Maximum	Overall	434	489	568
SD	1	5.50	6.75	16.24
SD	2	5.13	10.82	6.93
SD	3	5.32	21.93	14.31
SD	Overall	27.27	24.33	27.38

Overall	Median	371	438	512
	Minimum	364	421	489
	Maximum	434	489	568
	SD	27.27	24.33	27.38

AIMS Bookmark Standard Setting May 2005 Grade 5
Reading
Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	9	22.5	45
2	23	36	52
3	9	28	45
Overall	9	25	45

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	0.1	15.7	50.2	34.0

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	9	21	35	51
1	11	22	37	51
1	12	21	34	50
1	32	14	29	47
2	6	23	36	51
2	7	25	40	52
2	8	25	40	53
3	2	14	37	47
3	3	13	31	48
3	4	19	36	49
3	5	15	38	50

Overall	Median	21	36	50
	Minimum	13	29	47
	Maximum	25	40	53
	SD	4.54	3.41	1.97

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	9	424	471	556
1	11	428	478	556
1	12	424	468	545
1	32	397	451	523
2	6	431	474	556
2	7	438	489	568
2	8	438	489	585
3	2	397	478	523
3	3	392	457	530
3	4	417	474	537
3	5	401	482	545

Overall	Median	424	474	545
	Minimum	392	451	523
	Maximum	438	489	585
	SD	17.26	11.87	19.16

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	21	34.5	50.5
Median	2	25	40	52
Median	3	14.5	36.5	48.5
Median	Overall	21	36	50
Minimum	1	14	29	47
Minimum	2	23	36	51
Minimum	3	13	31	47
Minimum	Overall	13	29	47
Maximum	1	22	37	51
Maximum	2	25	40	53
Maximum	3	19	38	50
Maximum	Overall	25	40	53
SD	1	3.70	3.40	1.89
SD	2	1.15	2.31	1.00
SD	3	2.63	3.11	1.29
SD	Overall	4.54	3.41	1.97

Overall	Median	21	36	50
	Minimum	13	29	47
	Maximum	25	40	53
	SD	4.54	3.41	1.97

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	424	470	551
Median	2	438	489	568
Median	3	399	476	534
Median	Overall	424	474	545
Minimum	1	397	451	523
Minimum	2	431	474	556
Minimum	3	392	457	523
Minimum	Overall	392	451	523
Maximum	1	428	478	556
Maximum	2	438	489	585
Maximum	3	417	482	545
Maximum	Overall	438	489	585
SD	1	14.29	11.46	15.56
SD	2	4.04	8.66	14.57
SD	3	10.81	11.00	9.43
SD	Overall	17.26	11.87	19.16

Overall	Median	424	474	545
	Minimum	392	451	523
	Maximum	438	489	585
	SD	17.26	11.87	19.16

AIMS Bookmark Standard Setting May 2005 Grade 5
Reading
Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	21	34.5	50.5
2	25	40	52
3	14.5	36.5	48.5
Overall	21	36	50

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	9.4	27.7	50.3	12.6

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	9	19	35	51
1	11	22	36	51
1	12	21	34	50
1	32	13	28	46
2	6	24	38	51
2	7	25	40	52
2	8	25	40	53
3	2	14	37	47
3	3	17	28	49
3	4	19	36	49
3	5	15	38	50

Overall	Median	19	36	50
	Minimum	13	28	46
	Maximum	25	40	53
	SD	4.34	4.13	2.07

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	9	417	471	556
1	11	428	474	556
1	12	424	468	545
1	32	392	448	517
2	6	434	482	556
2	7	438	489	568
2	8	438	489	585
3	2	397	478	523
3	3	409	448	537
3	4	417	474	537
3	5	401	482	545

Overall	Median	417	474	545
	Minimum	392	448	517
	Maximum	438	489	585
	SD	16.37	14.07	19.51

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	20	34.5	50.5
Median	2	25	40	52
Median	3	16	36.5	49
Median	Overall	19	36	50
Minimum	1	13	28	46
Minimum	2	24	38	51
Minimum	3	14	28	47
Minimum	Overall	13	28	46
Maximum	1	22	36	51
Maximum	2	25	40	53
Maximum	3	19	38	50
Maximum	Overall	25	40	53
SD	1	4.03	3.59	2.38
SD	2	0.58	1.15	1.00
SD	3	2.22	4.57	1.26
SD	Overall	4.34	4.13	2.07

Overall	Median	19	36	50
	Minimum	13	28	46
	Maximum	25	40	53
	SD	4.34	4.13	2.07

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	421	470	551
Median	2	438	489	568
Median	3	405	476	537
Median	Overall	417	474	545
Minimum	1	392	448	517
Minimum	2	434	482	556
Minimum	3	397	448	523
Minimum	Overall	392	448	517
Maximum	1	428	474	556
Maximum	2	438	489	585
Maximum	3	417	482	545
Maximum	Overall	438	489	585
SD	1	16.15	11.76	18.41
SD	2	2.31	4.04	14.57
SD	3	8.87	15.35	9.15
SD	Overall	16.37	14.07	19.51

Overall	Median	417	474	545
	Minimum	392	448	517
	Maximum	438	489	585
	SD	16.37	14.07	19.51

AIMS Bookmark Standard Setting May 2005 Grade 5
Reading
Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	20	34.5	50.5
2	25	40	52
3	16	36.5	49
Overall	19	36	50

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	6.8	30.2	50.3	12.7

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	10	13	28	41
1	11	23	36	46
1	12	13	31	40
2	2	18	23	40
2	3	16	32	46
2	4	13	27	44
2	5	21	39	44
3	6	13	22	39
3	7	8	21	32
3	8	18	33	44
3	9	14	26	39

Overall	Median	14	28	41
	Minimum	8	21	32
	Maximum	23	39	46
	SD	4.27	5.84	4.08

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	10	408	478	536
1	11	457	512	567
1	12	408	490	531
2	2	434	457	531
2	3	424	494	567
2	4	408	473	553
2	5	448	526	553
3	6	408	452	526
3	7	373	448	494
3	8	434	499	553
3	9	413	469	526

Overall	Median	413	478	536
	Minimum	373	448	494
	Maximum	457	526	567
	SD	23.22	25.06	21.56

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	13	31	41
Median	2	17	29.5	44
Median	3	13.5	24	39
Median	Overall	14	28	41
Minimum	1	13	28	40
Minimum	2	13	23	40
Minimum	3	8	21	32
Minimum	Overall	8	21	32
Maximum	1	23	36	46
Maximum	2	21	39	46
Maximum	3	18	33	44
Maximum	Overall	23	39	46
SD	1	5.77	4.04	3.21
SD	2	3.37	6.90	2.52
SD	3	4.11	5.45	4.93
SD	Overall	4.27	5.84	4.08

Overall	Median	14	28	41
	Minimum	8	21	32
	Maximum	23	39	46
	SD	4.27	5.84	4.08

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	408	490	536
Median	2	429	484	553
Median	3	411	461	526
Median	Overall	413	478	536
Minimum	1	408	478	531
Minimum	2	408	457	531
Minimum	3	373	448	494
Minimum	Overall	373	448	494
Maximum	1	457	512	567
Maximum	2	448	526	567
Maximum	3	434	499	553
Maximum	Overall	457	526	567
SD	1	28.29	17.24	19.50
SD	2	16.84	29.80	14.88
SD	3	25.31	23.19	24.13
SD	Overall	23.22	25.06	21.56

Overall	Median	413	478	536
	Minimum	373	448	494
	Maximum	457	526	567
	SD	23.22	25.06	21.56

AIMS Bookmark Standard Setting May 2005 Grade 8
Reading
Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	13	31	41
2	17	29.5	44
3	13.5	24	39
Overall	14	28	41

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	0.8	18.0	37.6	43.6

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	10	19	35	46
1	11	19	32	45
1	12	13	31	45
2	2	18	23	49
2	3	19	37	49
2	4	18	37	48
2	5	19	35	48
3	6	15	32	43
3	7	15	25	45
3	8	16	32	43
3	9	14	26	45

Overall	Median	18	32	45
	Minimum	13	23	43
	Maximum	19	37	49
	SD	2.27	4.80	2.19

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	10	439	507	567
1	11	439	494	560
1	12	408	490	560
2	2	434	457	591
2	3	439	517	591
2	4	434	517	582
2	5	439	507	582
3	6	419	494	547
3	7	419	465	560
3	8	424	494	547
3	9	413	469	560

Overall	Median	434	494	560
	Minimum	408	457	547
	Maximum	439	517	591
	SD	11.66	20.49	16.09

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	19	32	45
Median	2	18.5	36	48.5
Median	3	15	29	44
Median	Overall	18	32	45
Minimum	1	13	31	45
Minimum	2	18	23	48
Minimum	3	14	25	43
Minimum	Overall	13	23	43
Maximum	1	19	35	46
Maximum	2	19	37	49
Maximum	3	16	32	45
Maximum	Overall	19	37	49
SD	1	3.46	2.08	0.58
SD	2	0.58	6.73	0.58
SD	3	0.82	3.77	1.15
SD	Overall	2.27	4.80	2.19

Overall	Median	18	32	45
	Minimum	13	23	43
	Maximum	19	37	49
	SD	2.27	4.80	2.19

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	439	494	560
Median	2	437	512	587
Median	3	419	482	554
Median	Overall	434	494	560
Minimum	1	408	490	560
Minimum	2	434	457	582
Minimum	3	413	465	547
Minimum	Overall	408	457	547
Maximum	1	439	507	567
Maximum	2	439	517	591
Maximum	3	424	494	560
Maximum	Overall	439	517	591
SD	1	17.90	8.89	4.04
SD	2	2.89	28.72	5.20
SD	3	4.50	15.67	7.51
SD	Overall	11.66	20.49	16.09

Overall	Median	434	494	560
	Minimum	408	457	547
	Maximum	439	517	591
	SD	11.66	20.49	16.09

AIMS Bookmark Standard Setting May 2005 Grade 8
Reading
Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	19	32	45
2	18.5	36	48.5
3	15	29	44
Overall	18	32	45

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	3.3	24.6	44.2	27.9

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	10	19	32	45
1	11	18	32	46
1	12	15	31	45
2	2	19	40	51
2	3	19	40	48
2	4	18	37	46
2	5	19	35	48
3	6	19	32	46
3	7	19	31	45
3	8	18	32	45
3	9	18	28	45

Overall	Median	19	32	46
	Minimum	15	28	45
	Maximum	19	40	51
	SD	1.19	3.88	1.91

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	10	439	494	560
1	11	434	494	567
1	12	419	490	560
2	2	439	531	615
2	3	439	531	582
2	4	434	517	567
2	5	439	507	582
3	6	439	494	567
3	7	439	490	560
3	8	434	494	560
3	9	434	478	560

Overall	Median	439	494	567
	Minimum	419	478	560
	Maximum	439	531	615
	SD	5.95	17.47	16.83

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	18	32	45
Median	2	19	38.5	48
Median	3	18.5	31.5	45
Median	Overall	19	32	46
Minimum	1	15	31	45
Minimum	2	18	35	46
Minimum	3	18	28	45
Minimum	Overall	15	28	45
Maximum	1	19	32	46
Maximum	2	19	40	51
Maximum	3	19	32	46
Maximum	Overall	19	40	51
SD	1	2.08	0.58	0.58
SD	2	0.50	2.45	2.06
SD	3	0.58	1.89	0.50
SD	Overall	1.19	3.88	1.91

Overall	Median	19	32	46
	Minimum	15	28	45
	Maximum	19	40	51
	SD	1.19	3.88	1.91

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	434	494	560
Median	2	439	524	582
Median	3	437	492	560
Median	Overall	439	494	567
Minimum	1	419	490	560
Minimum	2	434	507	567
Minimum	3	434	478	560
Minimum	Overall	419	478	560
Maximum	1	439	494	567
Maximum	2	439	531	615
Maximum	3	439	494	567
Maximum	Overall	439	531	615
SD	1	10.41	2.31	4.04
SD	2	2.50	11.70	20.27
SD	3	2.89	7.57	3.50
SD	Overall	5.95	17.47	16.83

Overall	Median	439	494	567
	Minimum	419	478	560
	Maximum	439	531	615
	SD	5.95	17.47	16.83

AIMS Bookmark Standard Setting May 2005 Grade 8
Reading
Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	18	32	45
2	19	38.5	48
3	18.5	31.5	45
Overall	19	32	46

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	4.5	23.4	48.4	23.7

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	10	26	38	48
1	11	27	38	48
1	12	19	33	46
2	2	37	45	53
2	3	25	40	50
2	4	25	49	50
2	5	25	37	49
3	6	21	33	50
3	7	21	31	47
3	8	19	32	49
3	9	18	28	45

Overall	Median	25	37	49
	Minimum	18	28	45
	Maximum	37	49	53
	SD	5.38	6.26	2.20

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	10	469	521	582
1	11	473	521	582
1	12	439	499	567
2	2	517	560	652
2	3	465	531	602
2	4	465	591	602
2	5	465	517	591
3	6	448	499	602
3	7	448	490	574
3	8	439	494	591
3	9	434	478	560

Overall	Median	465	517	591
	Minimum	434	478	560
	Maximum	517	591	652
	SD	23.28	33.11	24.64

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	26	38	48
Median	2	25	42.5	50
Median	3	20	31.5	48
Median	Overall	25	37	49
Minimum	1	19	33	46
Minimum	2	25	37	49
Minimum	3	18	28	45
Minimum	Overall	18	28	45
Maximum	1	27	38	48
Maximum	2	37	49	53
Maximum	3	21	33	50
Maximum	Overall	37	49	53
SD	1	4.36	2.89	1.15
SD	2	6.00	5.32	1.73
SD	3	1.50	2.16	2.22
SD	Overall	5.38	6.26	2.20

Overall	Median	25	37	49
	Minimum	18	28	45
	Maximum	37	49	53
	SD	5.38	6.26	2.20

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	469	521	582
Median	2	465	546	602
Median	3	444	492	583
Median	Overall	465	517	591
Minimum	1	439	499	567
Minimum	2	465	517	591
Minimum	3	434	478	560
Minimum	Overall	434	478	560
Maximum	1	473	521	582
Maximum	2	517	591	652
Maximum	3	448	499	602
Maximum	Overall	517	591	652
SD	1	18.58	12.70	8.66
SD	2	26.00	32.82	27.33
SD	3	6.95	8.96	18.52
SD	Overall	23.28	33.11	24.64

Overall	Median	465	517	591
	Minimum	434	478	560
	Maximum	517	591	652
	SD	23.28	33.11	24.64

AIMS Bookmark Standard Setting May 2005 Grade 8
Reading
Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	26	38	48
2	25	42.5	50
3	20	31.5	48
Overall	25	37	49

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	12.7	30.3	44.8	12.2

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 5 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	10	23	32	48
1	11	22	35	48
1	12	19	32	48
2	2	27	34	51
2	3	23	32	50
2	4	24	32	50
2	5	11	32	48
3	6	19	32	49
3	7	19	32	49
3	8	19	32	49
3	9	18	30	48

Overall	Median	19	32	49
	Minimum	11	30	48
	Maximum	27	35	51
	SD	4.18	1.27	1.04

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 5 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	10	457	494	582
1	11	452	507	582
1	12	439	494	582
2	2	473	503	615
2	3	457	494	602
2	4	461	494	602
2	5	395	494	582
3	6	439	494	591
3	7	439	494	591
3	8	439	494	591
3	9	434	486	582

Overall	Median	439	494	591
	Minimum	395	486	582
	Maximum	473	507	615
	SD	20.33	5.44	11.06

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 5 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	22	32	48
Median	2	23.5	32	50
Median	3	19	32	49
Median	Overall	19	32	49
Minimum	1	19	32	48
Minimum	2	11	32	48
Minimum	3	18	30	48
Minimum	Overall	11	30	48
Maximum	1	23	35	48
Maximum	2	27	34	51
Maximum	3	19	32	49
Maximum	Overall	27	35	51
SD	1	2.08	1.73	0.00
SD	2	7.04	1.00	1.26
SD	3	0.50	1.00	0.50
SD	Overall	4.18	1.27	1.04

Overall	Median	19	32	49
	Minimum	11	30	48
	Maximum	27	35	51
	SD	4.18	1.27	1.04

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading
Round 5 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	452	494	582
Median	2	459	494	602
Median	3	439	494	591
Median	Overall	439	494	591
Minimum	1	439	494	582
Minimum	2	395	494	582
Minimum	3	434	486	582
Minimum	Overall	395	486	582
Maximum	1	457	507	582
Maximum	2	473	503	615
Maximum	3	439	494	591
Maximum	Overall	473	507	615
SD	1	9.29	7.51	0.00
SD	2	35.00	4.50	13.62
SD	3	2.50	4.00	4.50
SD	Overall	20.33	5.44	11.06

Overall	Median	439	494	591
	Minimum	395	486	582
	Maximum	473	507	615
	SD	20.33	5.44	11.06

AIMS Bookmark Standard Setting May 2005 Grade 8
Reading
Round 5 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	22	32	48
2	23.5	32	50
3	19	32	49
Overall	19	32	49

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
Overall	4.5	23.4	60.0	12.1

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 1 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	6	13	25	41
1	7	13	29	38
1	8	4	10	25
2	9	21	30	48
2	11	14	27	46
2	12	25	34	43
3	1	9	20	42
3	2	4	9	36
3	3	9	22	49
3	4	15	30	45

Overall	Median	13	26	42.5
	Minimum	4	9	25
	Maximum	25	34	49
	SD	6.72	8.47	7.06

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 1 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	6	597	645	706
1	7	597	660	693
1	8	526	581	645
2	9	631	663	745
2	11	602	652	731
2	12	645	677	715
3	1	574	627	710
3	2	526	574	685
3	3	574	635	753
3	4	606	663	726

Overall	Median	597	649	710
	Minimum	526	574	645
	Maximum	645	677	753
	SD	39.24	34.92	31.52

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 1 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	13	25	38
Median	2	21	30	46
Median	3	9	21	43.5
Median	Overall	13	26	42.5
Minimum	1	4	10	25
Minimum	2	14	27	43
Minimum	3	4	9	36
Minimum	Overall	4	9	25
Maximum	1	13	29	41
Maximum	2	25	34	48
Maximum	3	15	30	49
Maximum	Overall	25	34	49
SD	1	5.20	10.02	8.50
SD	2	5.57	3.51	2.52
SD	3	4.50	8.66	5.48
SD	Overall	6.72	8.47	7.06

Overall	Median	13	26	42.5
	Minimum	4	9	25
	Maximum	25	34	49
	SD	6.72	8.47	7.06

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 1 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	597	645	693
Median	2	631	663	731
Median	3	574	631	718
Median	Overall	597	649	710
Minimum	1	526	581	645
Minimum	2	602	652	715
Minimum	3	526	574	685
Minimum	Overall	526	574	645
Maximum	1	597	660	706
Maximum	2	645	677	745
Maximum	3	606	663	753
Maximum	Overall	645	677	753
SD	1	40.99	41.96	32.13
SD	2	21.93	12.53	15.01
SD	3	32.98	37.19	28.52
SD	Overall	39.24	34.92	31.52

Overall	Median	597	649	710
	Minimum	526	574	645
	Maximum	645	677	753
	SD	39.24	34.92	31.52

AIMS Bookmark Standard Setting May 2005 High School
Reading
Round 1 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	13	25	38
2	21	30	46
3	9	21	43.5
Overall	13	26	42.5

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	1.1	18.2	42.0	38.7
G10	0.9	15.2	39.2	44.7
G11	2.0	29.7	52.4	15.9

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 2 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	6	13	26	48
1	7	13	25	47
1	8	10	25	45
2	9	13	25	46
2	11	14	26	49
2	12	15	26	50
3	1	19	28	50
3	2	16	27	49
3	3	10	28	49
3	4	22	28	47

Overall	Median	13.5	26	48.5
	Minimum	10	25	45
	Maximum	22	28	50
	SD	3.75	1.26	1.70

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 2 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	6	597	649	745
1	7	597	645	738
1	8	581	645	726
2	9	597	645	731
2	11	602	649	753
2	12	606	649	762
3	1	623	656	762
3	2	611	652	753
3	3	581	656	753
3	4	635	656	738

Overall	Median	597	649	745
	Minimum	581	645	726
	Maximum	635	656	762
	SD	16.91	4.59	12.53

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 2 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	13	25	47
Median	2	14	26	49
Median	3	17.5	28	49
Median	Overall	13.5	26	48.5
Minimum	1	10	25	45
Minimum	2	13	25	46
Minimum	3	10	27	47
Minimum	Overall	10	25	45
Maximum	1	13	26	48
Maximum	2	15	26	50
Maximum	3	22	28	50
Maximum	Overall	22	28	50
SD	1	1.73	0.58	1.53
SD	2	1.00	0.58	2.08
SD	3	5.12	0.50	1.26
SD	Overall	3.75	1.26	1.70

Overall	Median	13.5	26	48.5
	Minimum	10	25	45
	Maximum	22	28	50
	SD	3.75	1.26	1.70

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 2 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	597	645	738
Median	2	602	649	753
Median	3	617	656	753
Median	Overall	597	649	745
Minimum	1	581	645	726
Minimum	2	597	645	731
Minimum	3	581	652	738
Minimum	Overall	581	645	726
Maximum	1	597	649	745
Maximum	2	606	649	762
Maximum	3	635	656	762
Maximum	Overall	635	656	762
SD	1	9.24	2.31	9.61
SD	2	4.51	2.31	15.95
SD	3	23.17	2.00	9.95
SD	Overall	16.91	4.59	12.53

Overall	Median	597	649	745
	Minimum	581	645	726
	Maximum	635	656	762
	SD	16.91	4.59	12.53

AIMS Bookmark Standard Setting May 2005 High School
Reading
Round 2 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	13	25	47
2	14	26	49
3	17.5	28	49
Overall	13.5	26	48.5

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	1.1	18.2	63.3	17.4
G10	0.9	15.2	63.5	20.4
G11	2.0	29.7	62.5	5.8

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 3 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	6	19	29	49
1	7	13	25	48
1	8	13	25	48
2	9	14	25	46
2	11	14	27	49
2	12	15	27	50
3	1	19	28	50
3	2	13	25	49
3	3	17	28	49
3	4	21	28	47

Overall	Median	14.5	27	49
	Minimum	13	25	46
	Maximum	21	29	50
	SD	2.97	1.57	1.27

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 3 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	6	623	660	753
1	7	597	645	745
1	8	597	645	745
2	9	602	645	731
2	11	602	652	753
2	12	606	652	762
3	1	623	656	762
3	2	597	645	753
3	3	615	656	753
3	4	631	656	738

Overall	Median	602	652	753
	Minimum	597	645	731
	Maximum	631	660	762
	SD	12.69	5.79	9.87

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 3 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	13	25	48
Median	2	14	27	49
Median	3	18	28	49
Median	Overall	14.5	27	49
Minimum	1	13	25	48
Minimum	2	14	25	46
Minimum	3	13	25	47
Minimum	Overall	13	25	46
Maximum	1	19	29	49
Maximum	2	15	27	50
Maximum	3	21	28	50
Maximum	Overall	21	29	50
SD	1	3.46	2.31	0.58
SD	2	0.58	1.15	2.08
SD	3	3.42	1.50	1.26
SD	Overall	2.97	1.57	1.27

Overall	Median	14.5	27	49
	Minimum	13	25	46
	Maximum	21	29	50
	SD	2.97	1.57	1.27

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 3 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	597	645	745
Median	2	602	652	753
Median	3	619	656	753
Median	Overall	602	652	753
Minimum	1	597	645	745
Minimum	2	602	645	731
Minimum	3	597	645	738
Minimum	Overall	597	645	731
Maximum	1	623	660	753
Maximum	2	606	652	762
Maximum	3	631	656	762
Maximum	Overall	631	660	762
SD	1	15.01	8.66	4.62
SD	2	2.31	4.04	15.95
SD	3	14.55	5.50	9.95
SD	Overall	12.69	5.79	9.87

Overall	Median	602	652	753
	Minimum	597	645	731
	Maximum	631	660	762
	SD	12.69	5.79	9.87

AIMS Bookmark Standard Setting May 2005 High School
Reading
Round 3 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	13	25	48
2	14	27	49
3	18	28	49
Overall	14.5	27	49

Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	1.7	19.5	65.0	13.8
G10	1.4	16.3	66.1	16.2
G11	3.0	31.7	60.7	4.6

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 4 Bookmark Placements

Table	Participant	Approaches	Meets	Exceeds
1	6	19	34	49
1	7	19	29	48
1	8	19	29	48
2	9	21	30	48
2	11	14	29	49
2	12	20	34	52
3	1	20	32	50
3	2	20	32	49
3	3	20	32	49
3	4	24	32	47

Overall	Median	20	32	49
	Minimum	14	29	47
	Maximum	24	34	52
	SD	2.46	1.95	1.37

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 4 Cut Scores

Table	Participant	Approaches	Meets	Exceeds
1	6	623	677	753
1	7	623	660	745
1	8	623	660	745
2	9	631	663	745
2	11	602	660	753
2	12	627	677	786
3	1	627	670	762
3	2	627	670	753
3	3	627	670	753
3	4	642	670	738

Overall	Median	627	670	753
	Minimum	602	660	738
	Maximum	642	677	786
	SD	9.90	6.62	13.28

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 4 Summary of Bookmark Placements

Statistic	Table	Approaches	Meets	Exceeds
Median	1	19	29	48
Median	2	20	30	49
Median	3	20	32	49
Median	Overall	20	32	49
Minimum	1	19	29	48
Minimum	2	14	29	48
Minimum	3	20	32	47
Minimum	Overall	14	29	47
Maximum	1	19	34	49
Maximum	2	21	34	52
Maximum	3	24	32	50
Maximum	Overall	24	34	52
SD	1	0.00	2.89	0.58
SD	2	3.79	2.65	2.08
SD	3	2.00	0.00	1.26
SD	Overall	2.46	1.95	1.37

Overall	Median	20	32	49
	Minimum	14	29	47
	Maximum	24	34	52
	SD	2.46	1.95	1.37

AIMS Bookmark Standard Setting May 2005 High School Reading
Round 4 Summary of Cut Scores

Statistic	Table	Approaches	Meets	Exceeds
Median	1	623	660	745
Median	2	627	663	753
Median	3	627	670	753
Median	Overall	627	670	753
Minimum	1	623	660	745
Minimum	2	602	660	745
Minimum	3	627	670	738
Minimum	Overall	602	660	738
Maximum	1	623	677	753
Maximum	2	631	677	786
Maximum	3	642	670	762
Maximum	Overall	642	677	786
SD	1	0.00	9.81	4.62
SD	2	15.72	9.07	21.73
SD	3	7.50	0.00	9.95
SD	Overall	9.90	6.62	13.28

Overall	Median	627	670	753
	Minimum	602	660	738
	Maximum	642	677	786
	SD	9.90	6.62	13.28

AIMS Bookmark Standard Setting May 2005 High School
Reading
Round 4 Median Bookmark Summary

Table	Approaches	Meets	Exceeds
1	19	29	48
2	20	30	49
3	20	32	49
Overall	20	32	49

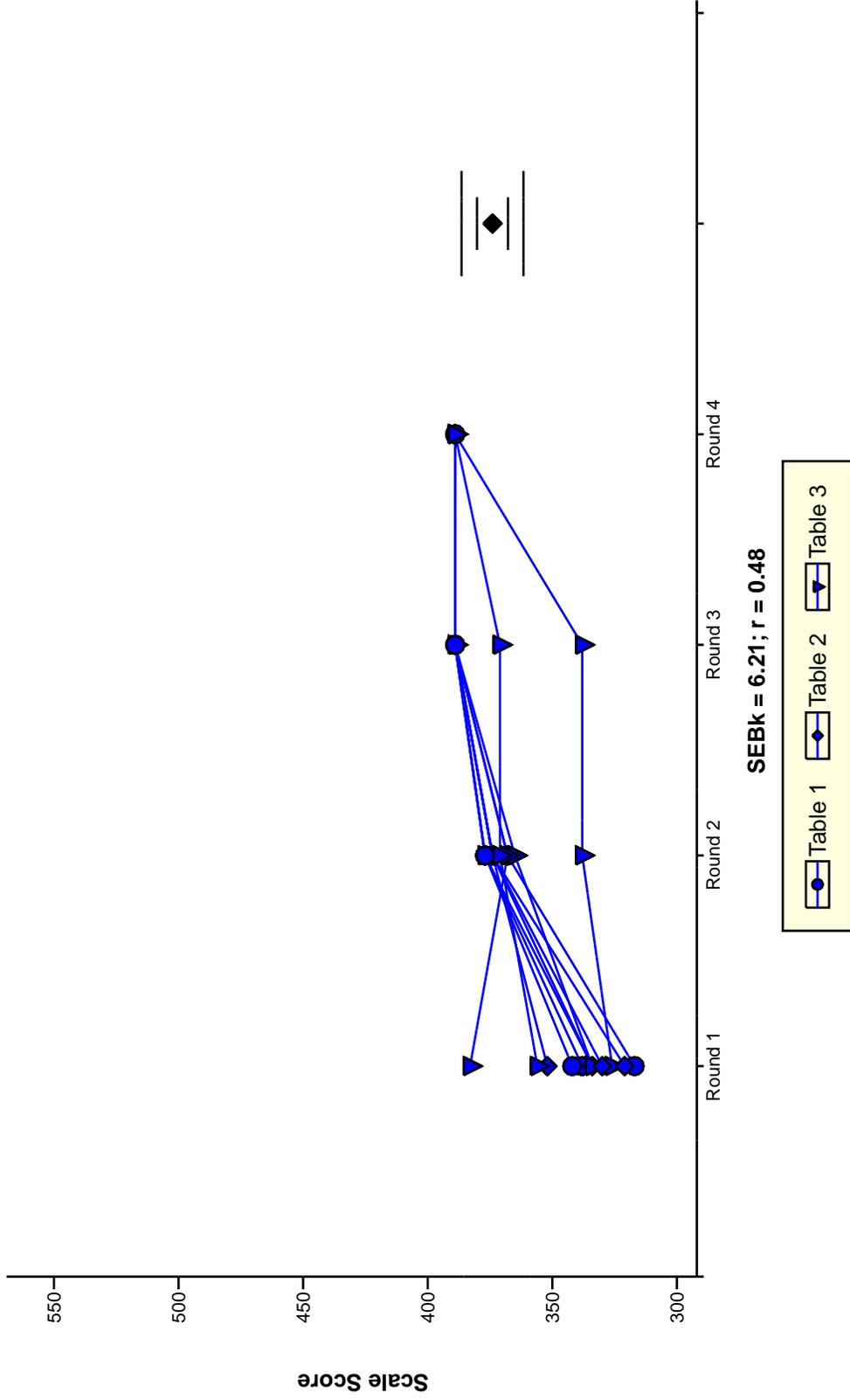
Impact Data

	Falls Far Below	Approaches	Meets	Exceeds
G1011	9.2	22.4	54.7	13.7
G10	7.6	19.0	57.3	16.1
G11	15.2	35.1	45.0	4.7

Section I

Graphical Representations of Participants' Judgments and Standard Errors

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Approaches Cut Point

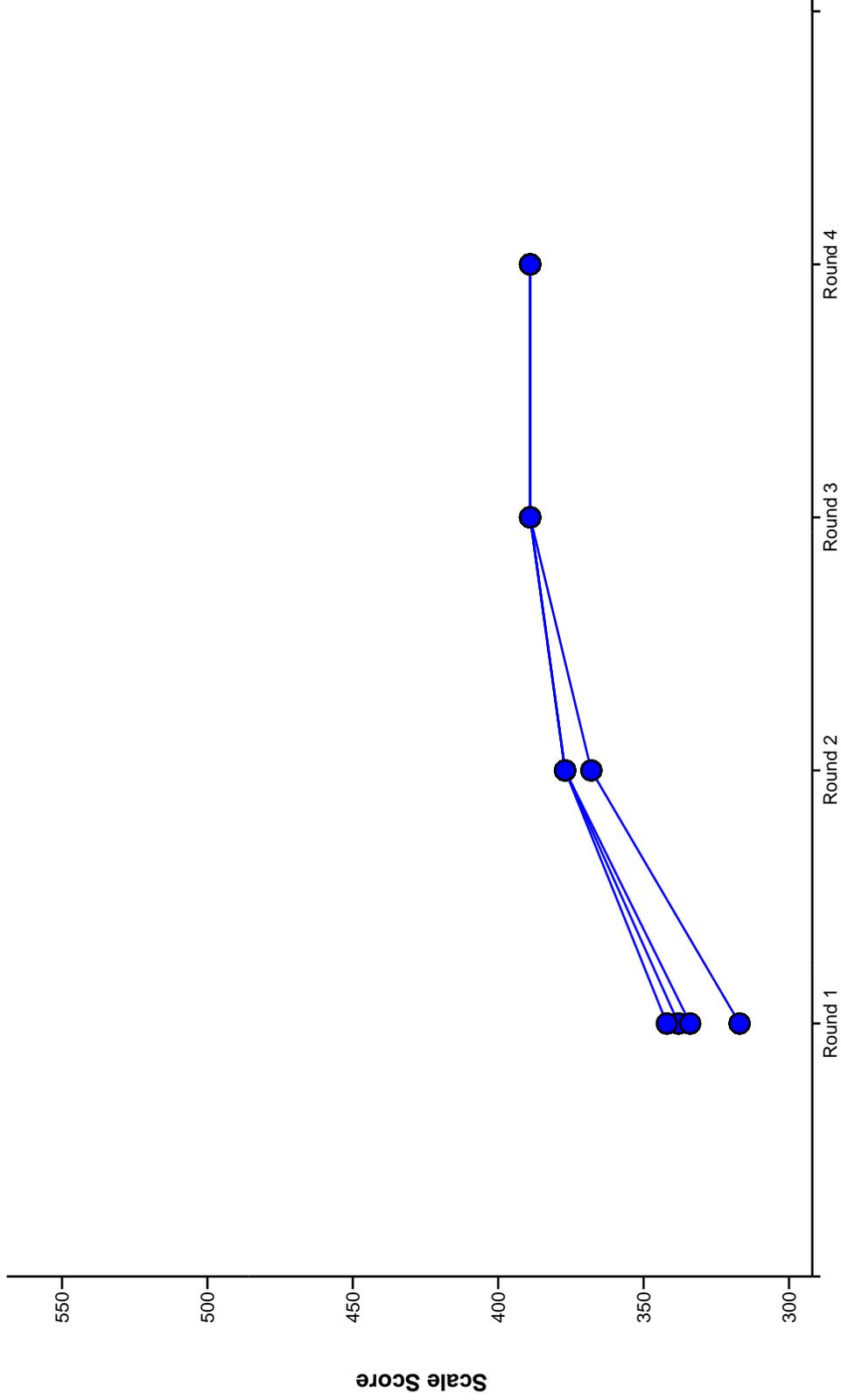


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Approaches Cut Point

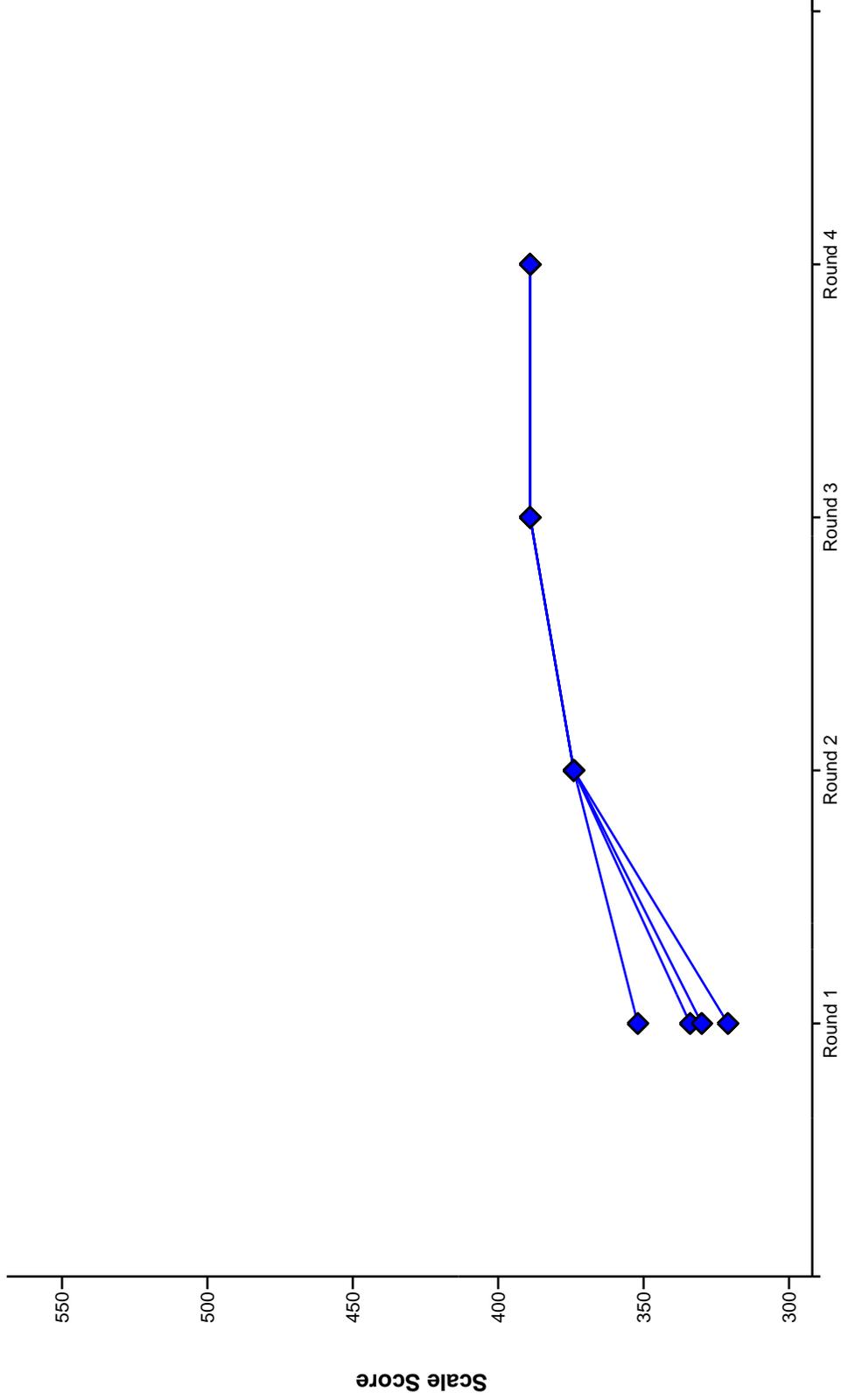


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Approaches Cut Point

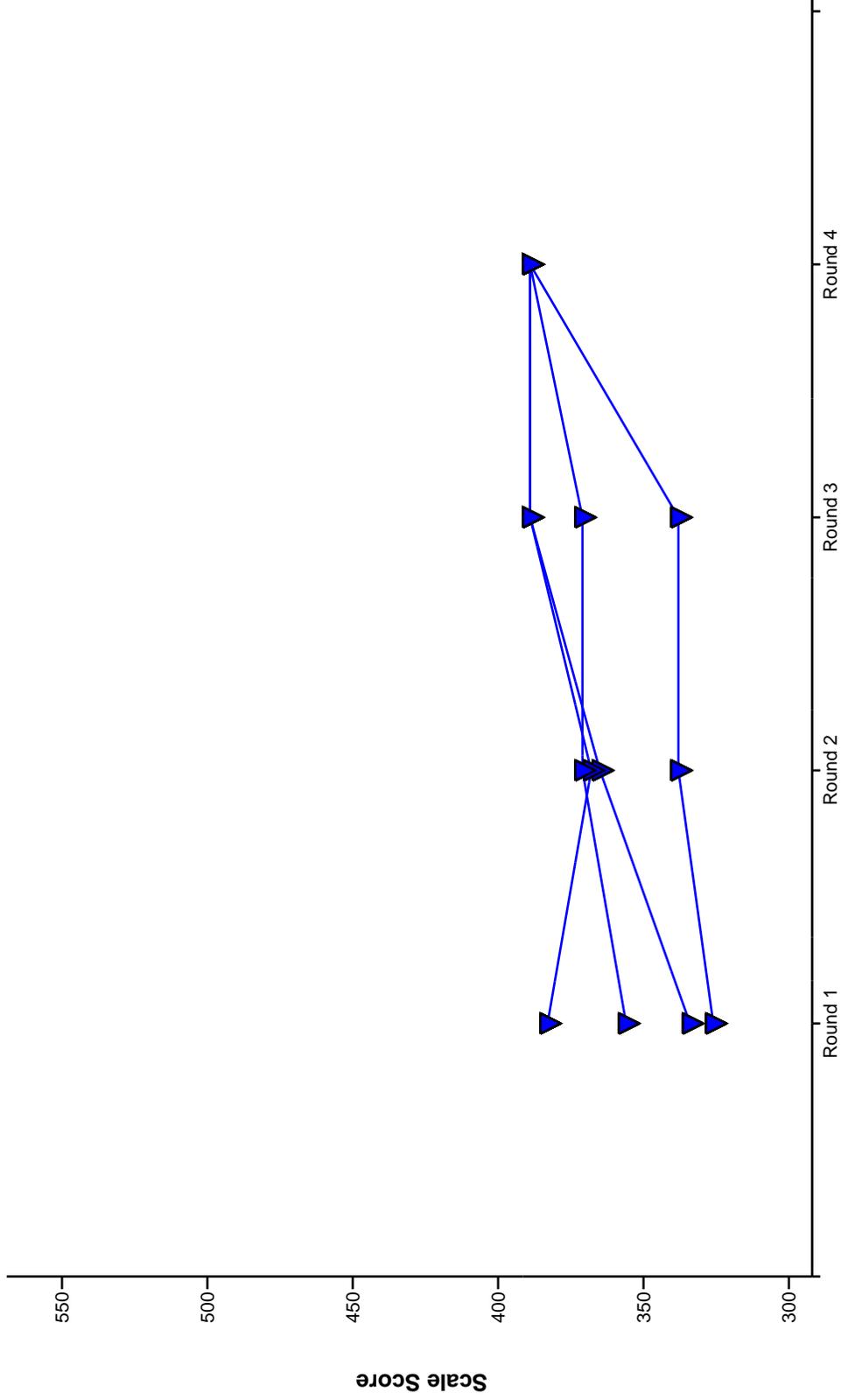
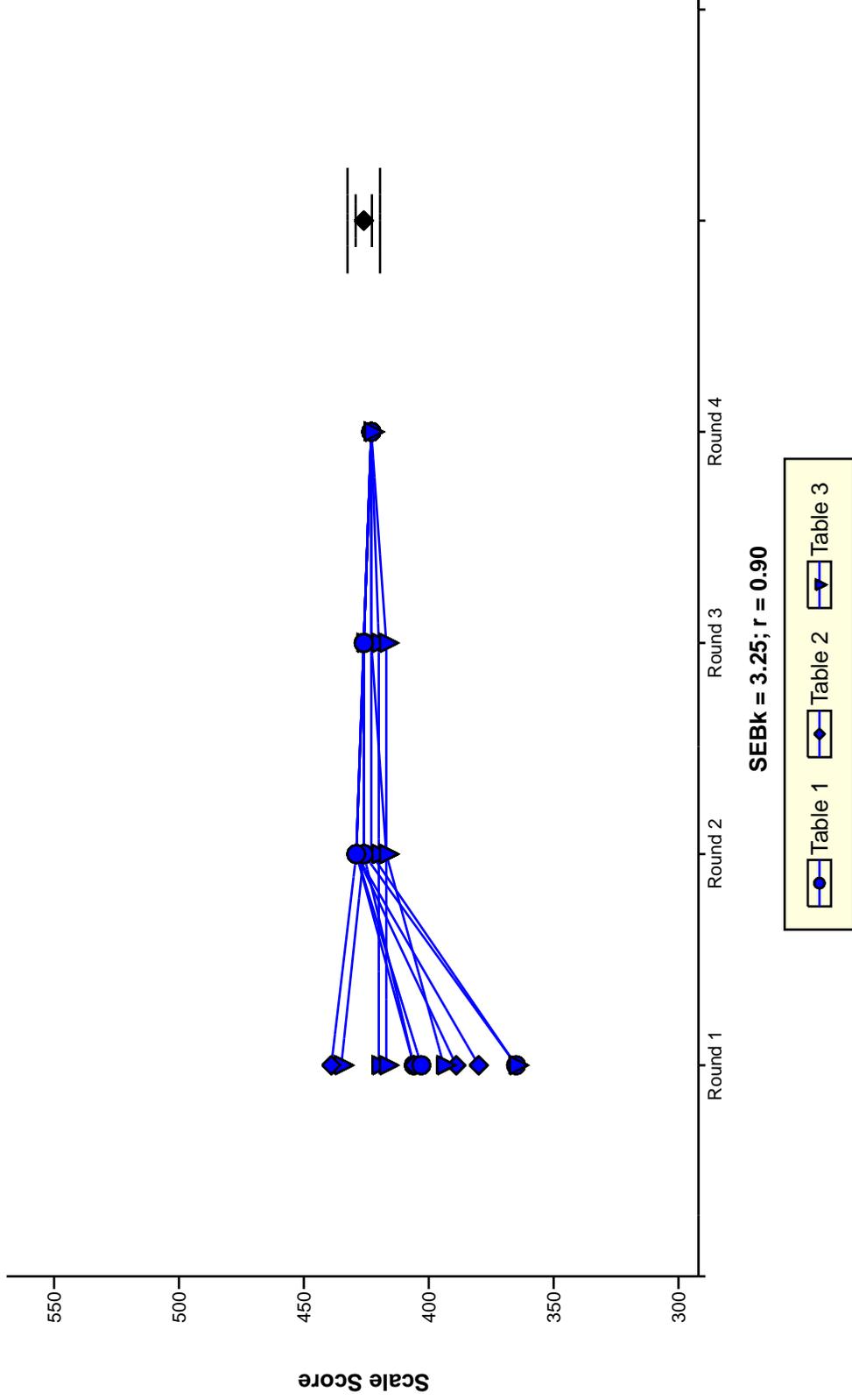


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Meets Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Meets Cut Point

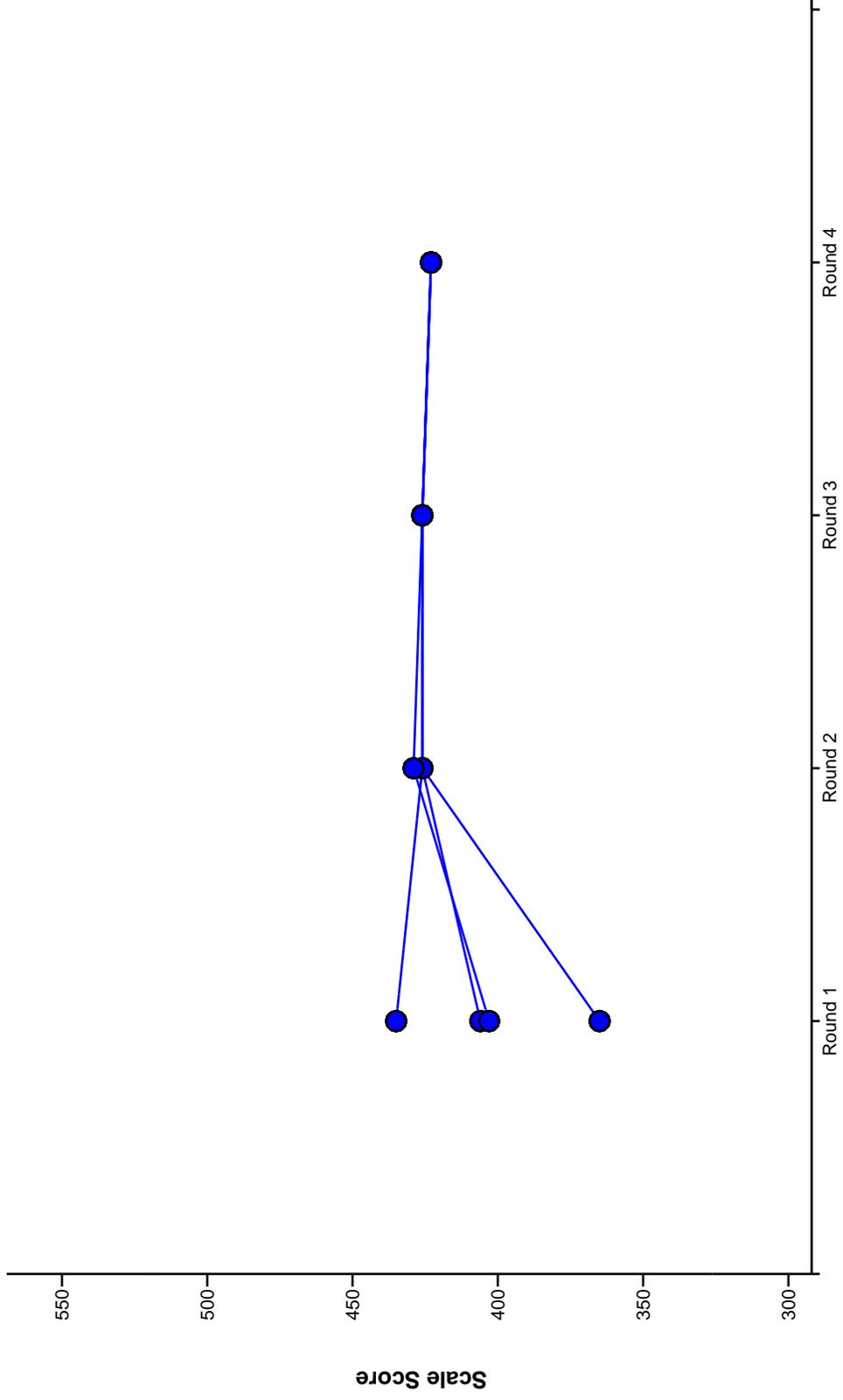


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Meets Cut Point

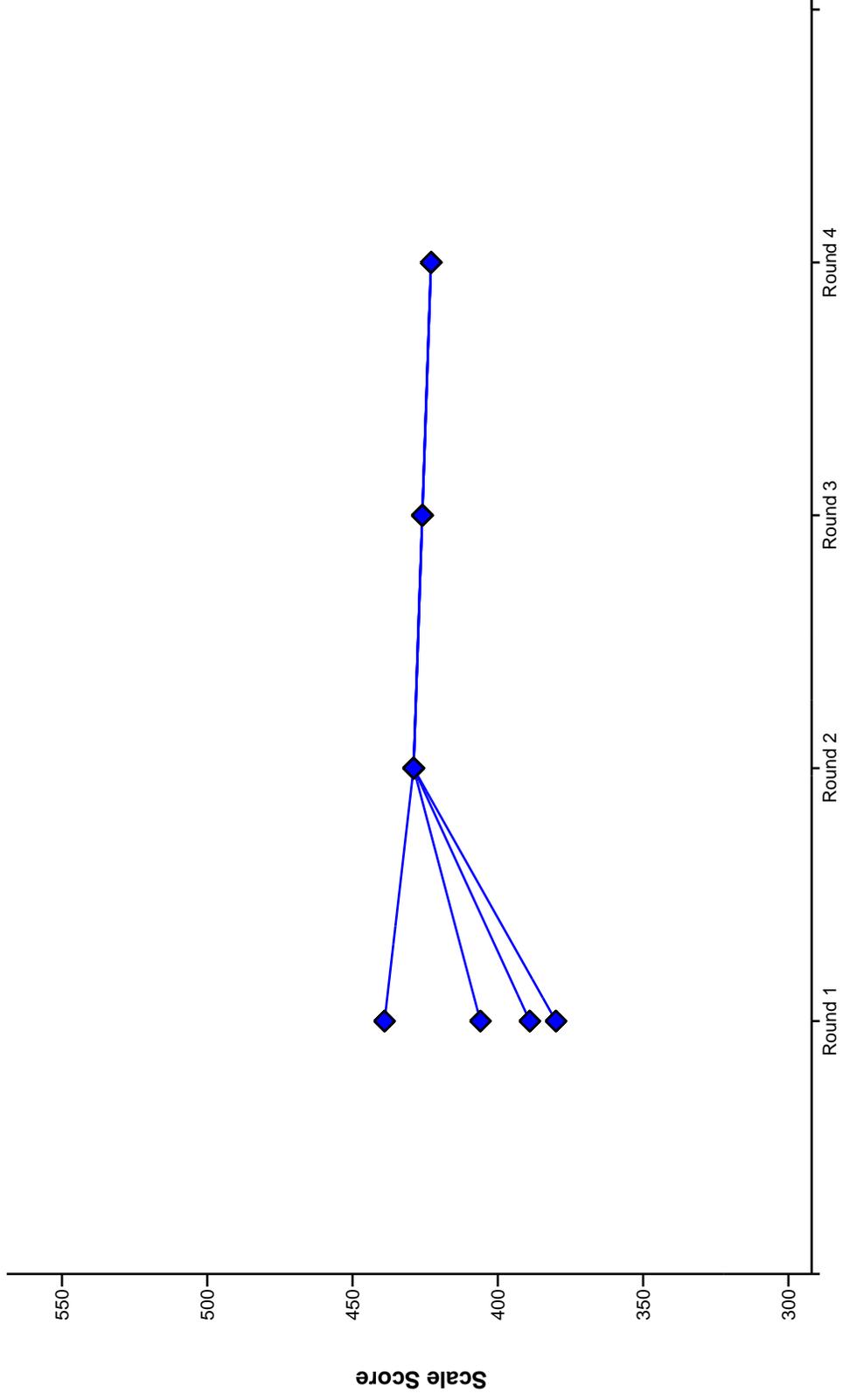


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Meets Cut Point

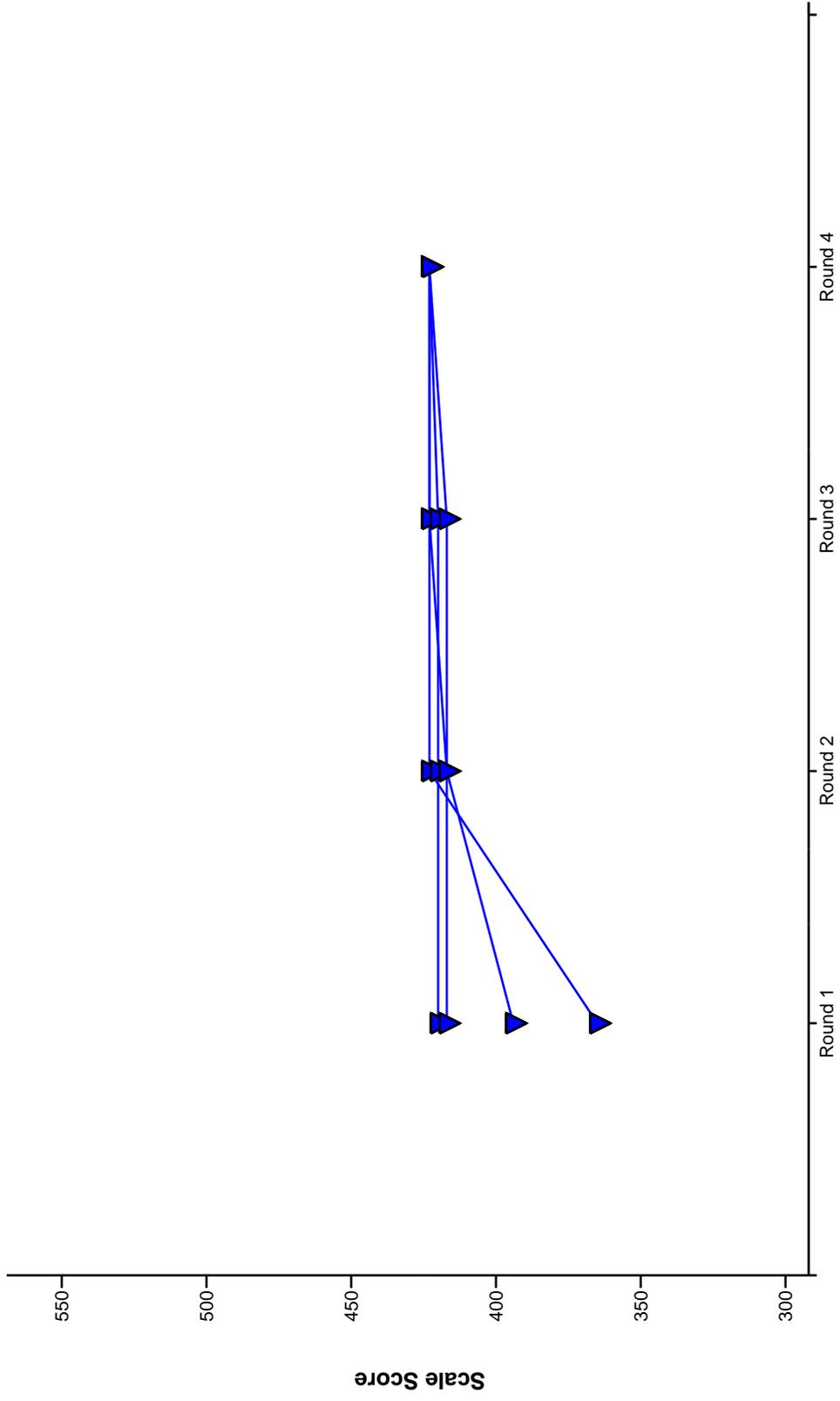
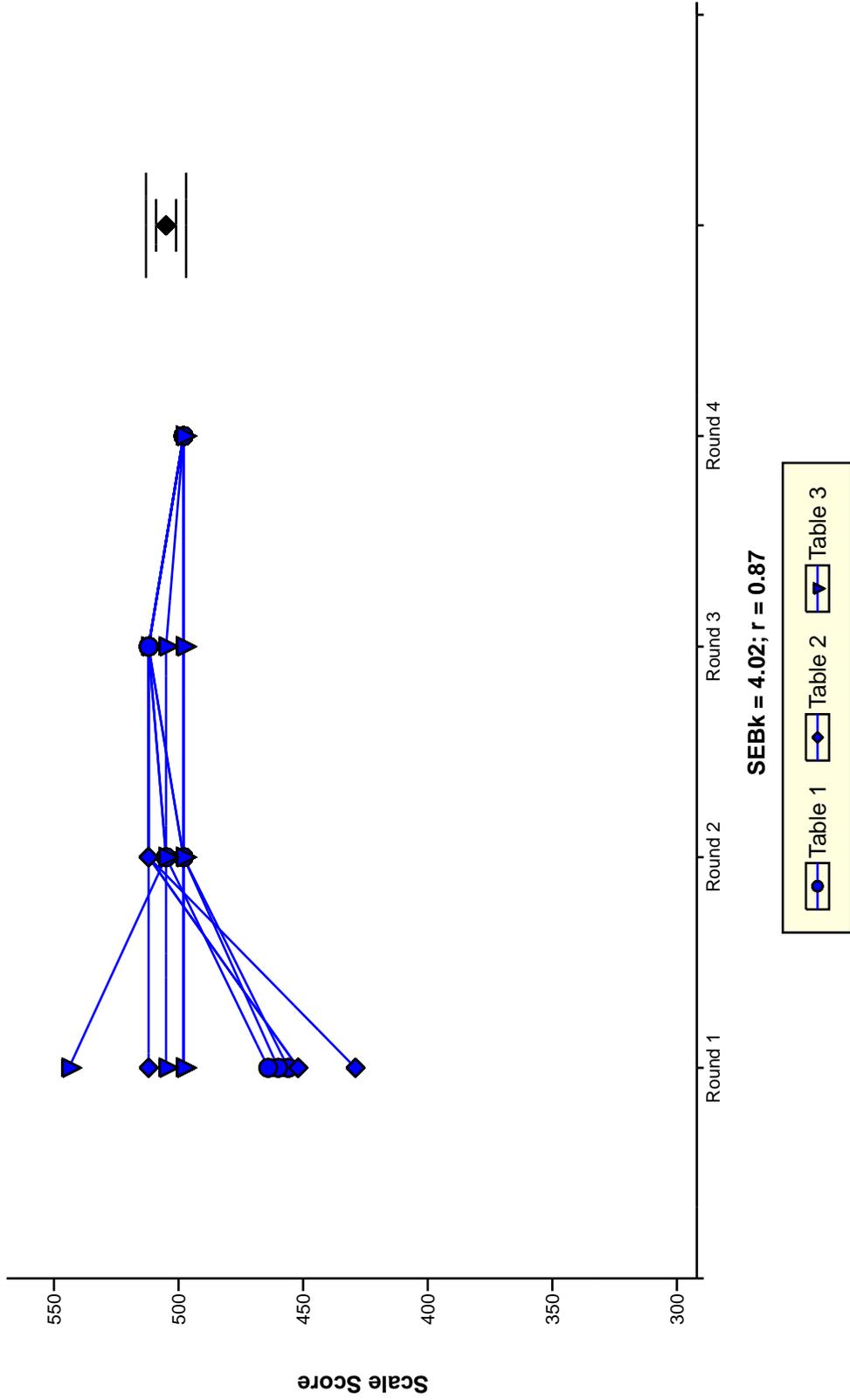


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Exceeds Cut Point

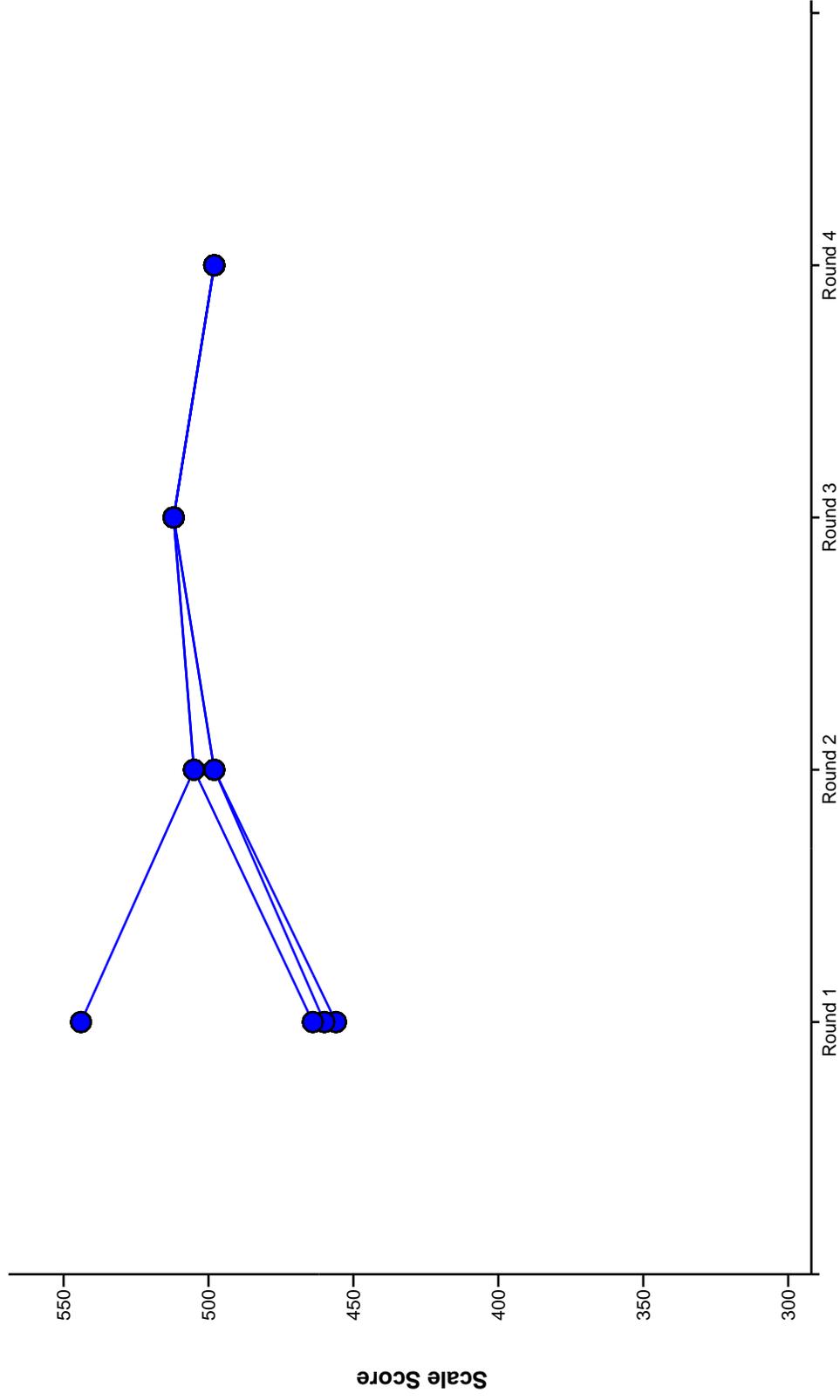


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Exceeds Cut Point

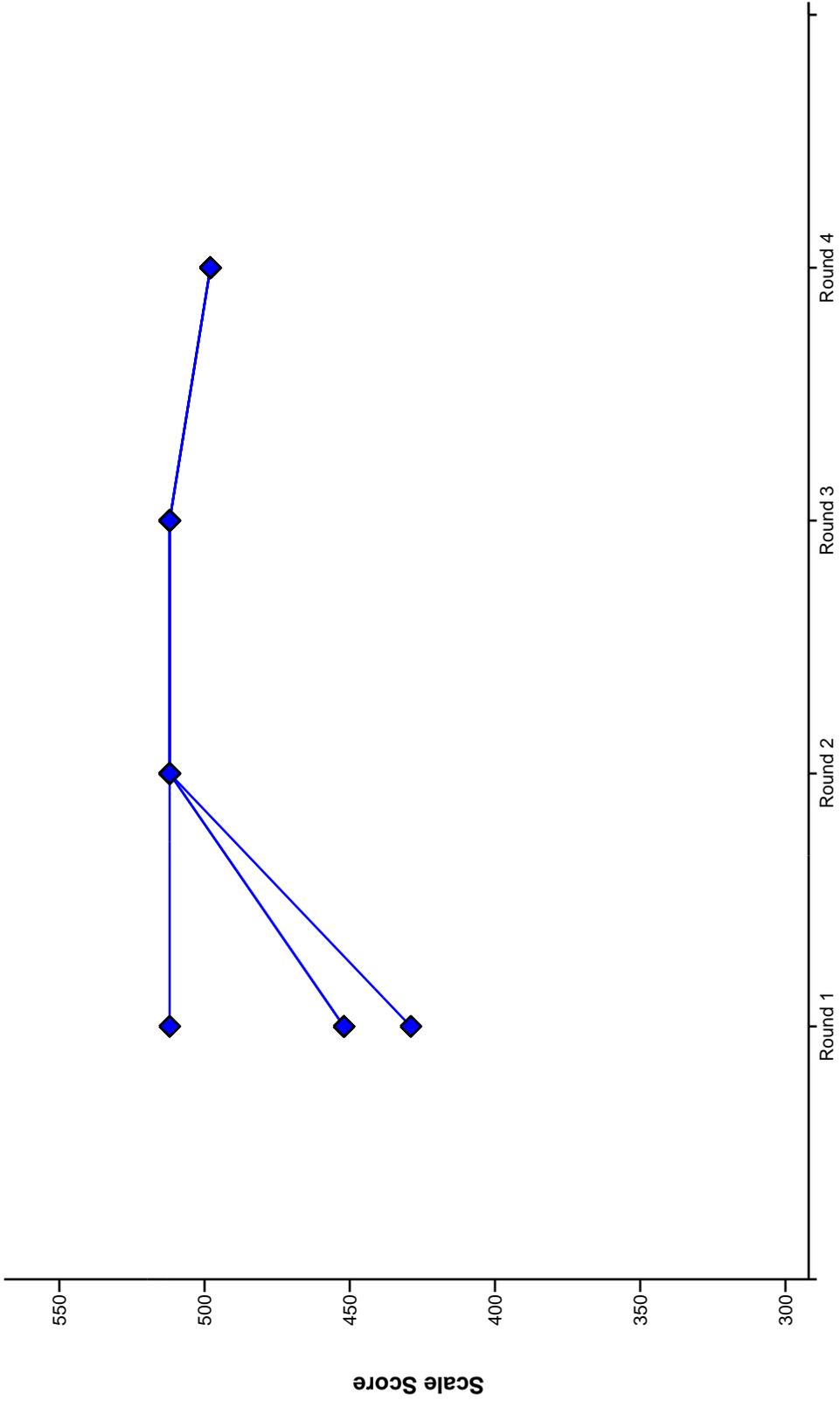


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 3 Mathematics Exceeds Cut Point

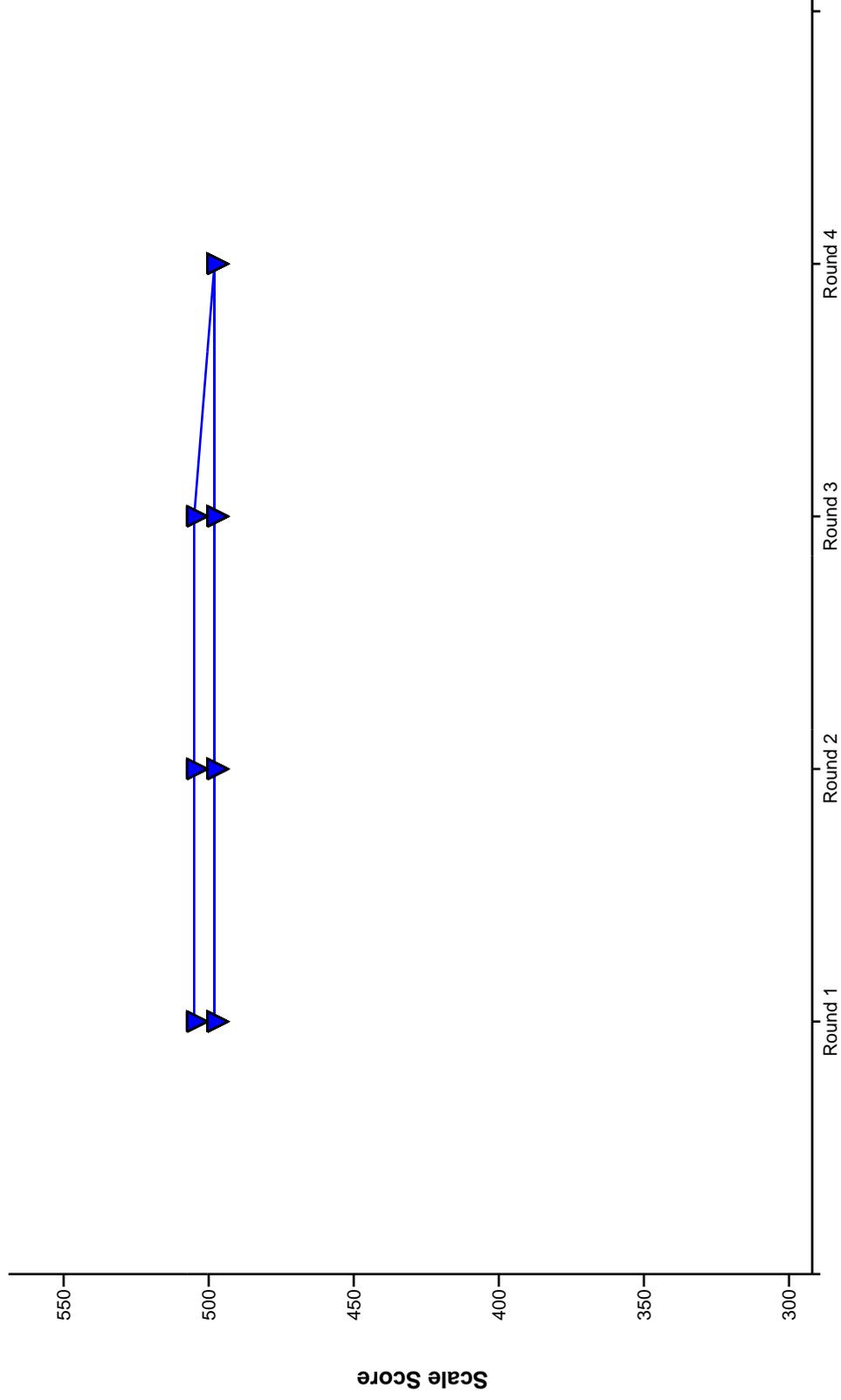
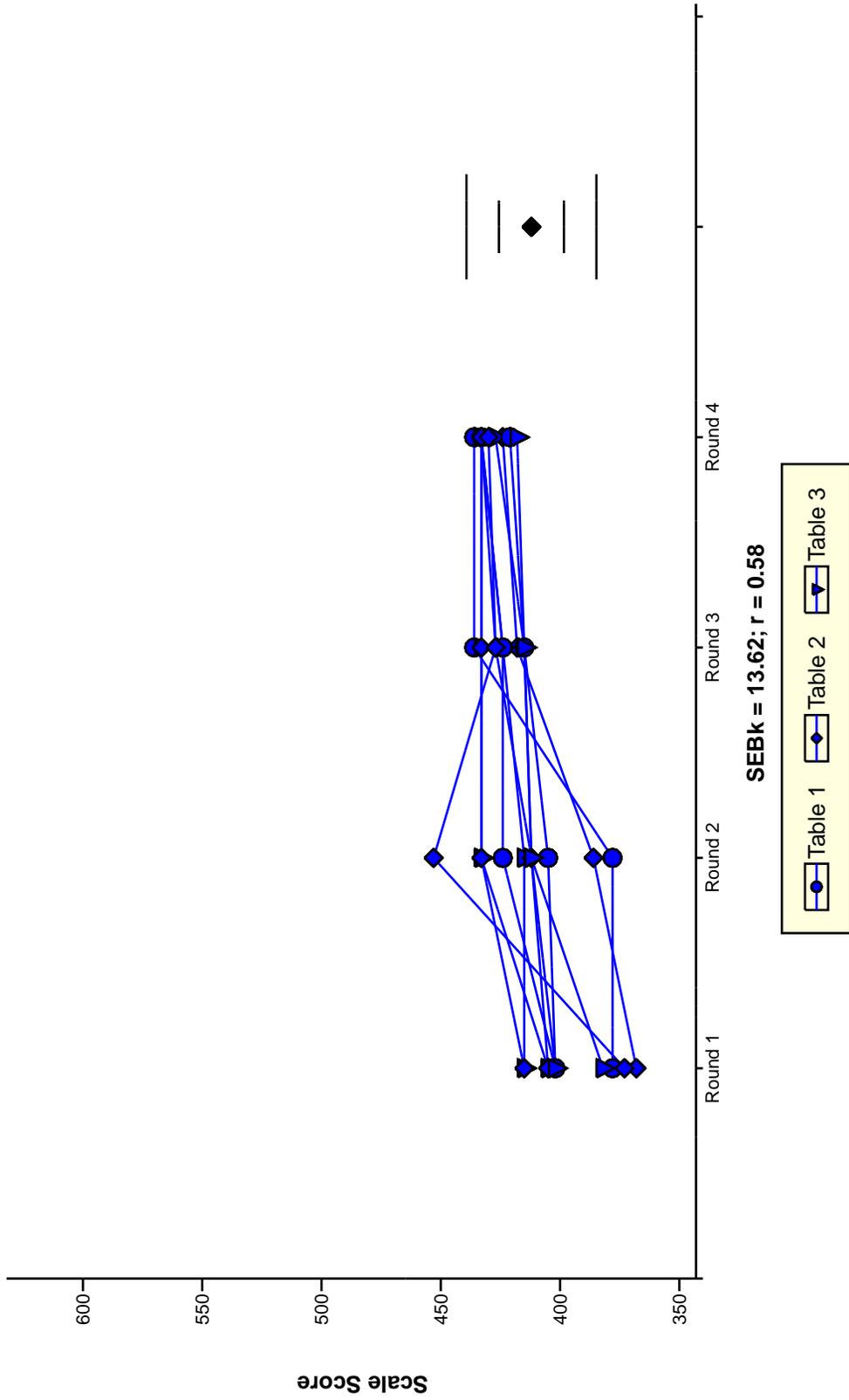


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Approaches Cut Point

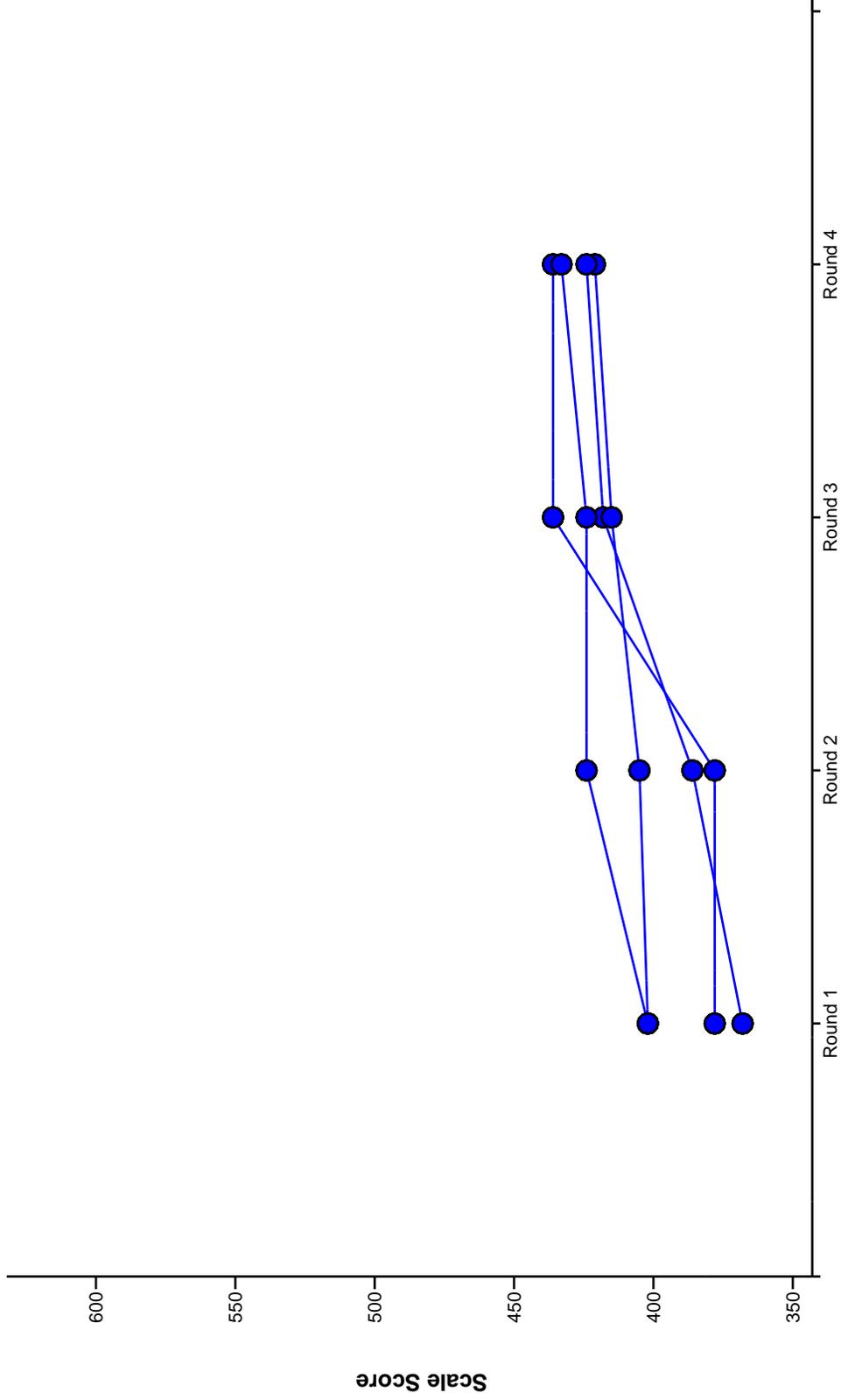


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Approaches Cut Point

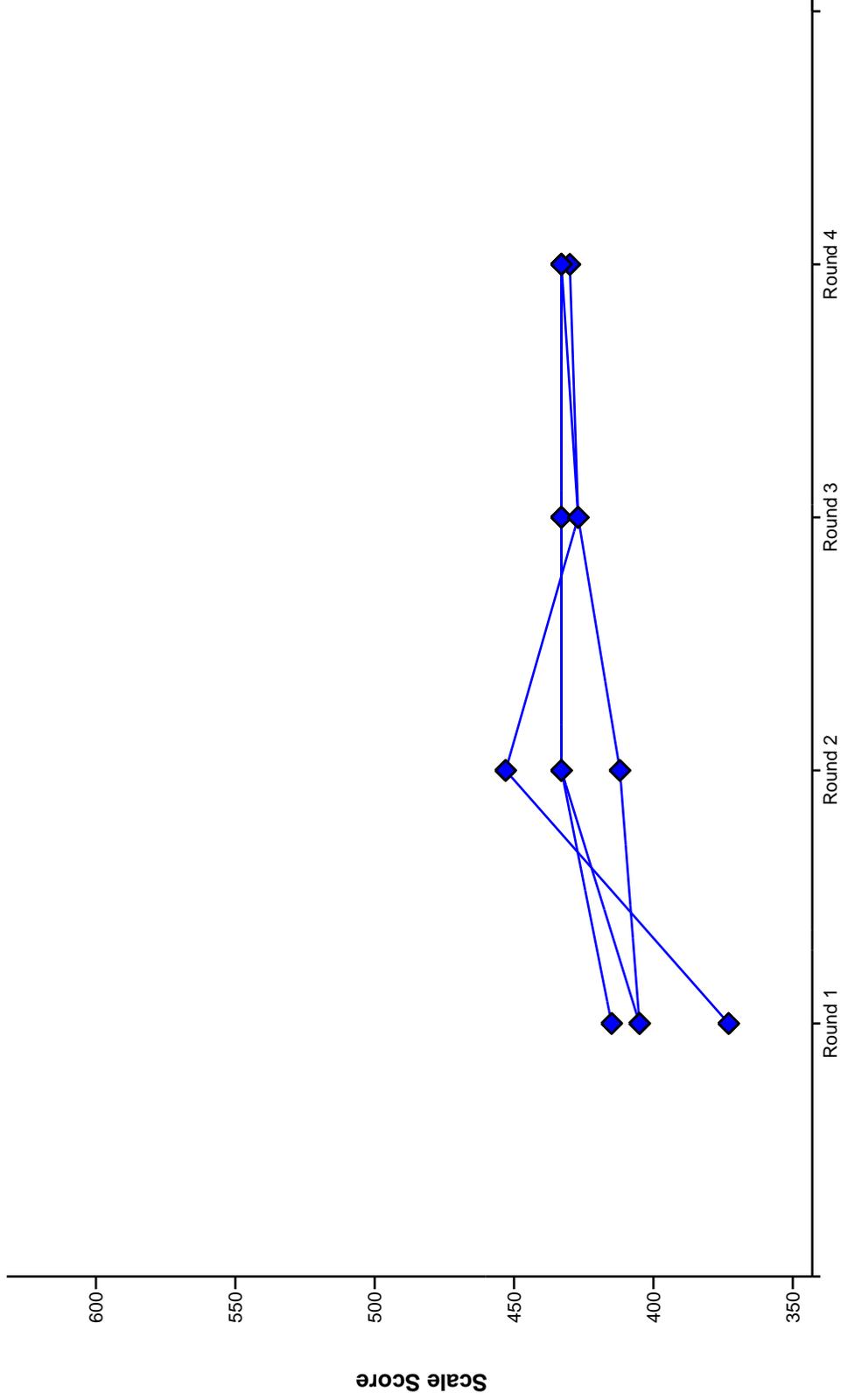


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Approaches Cut Point

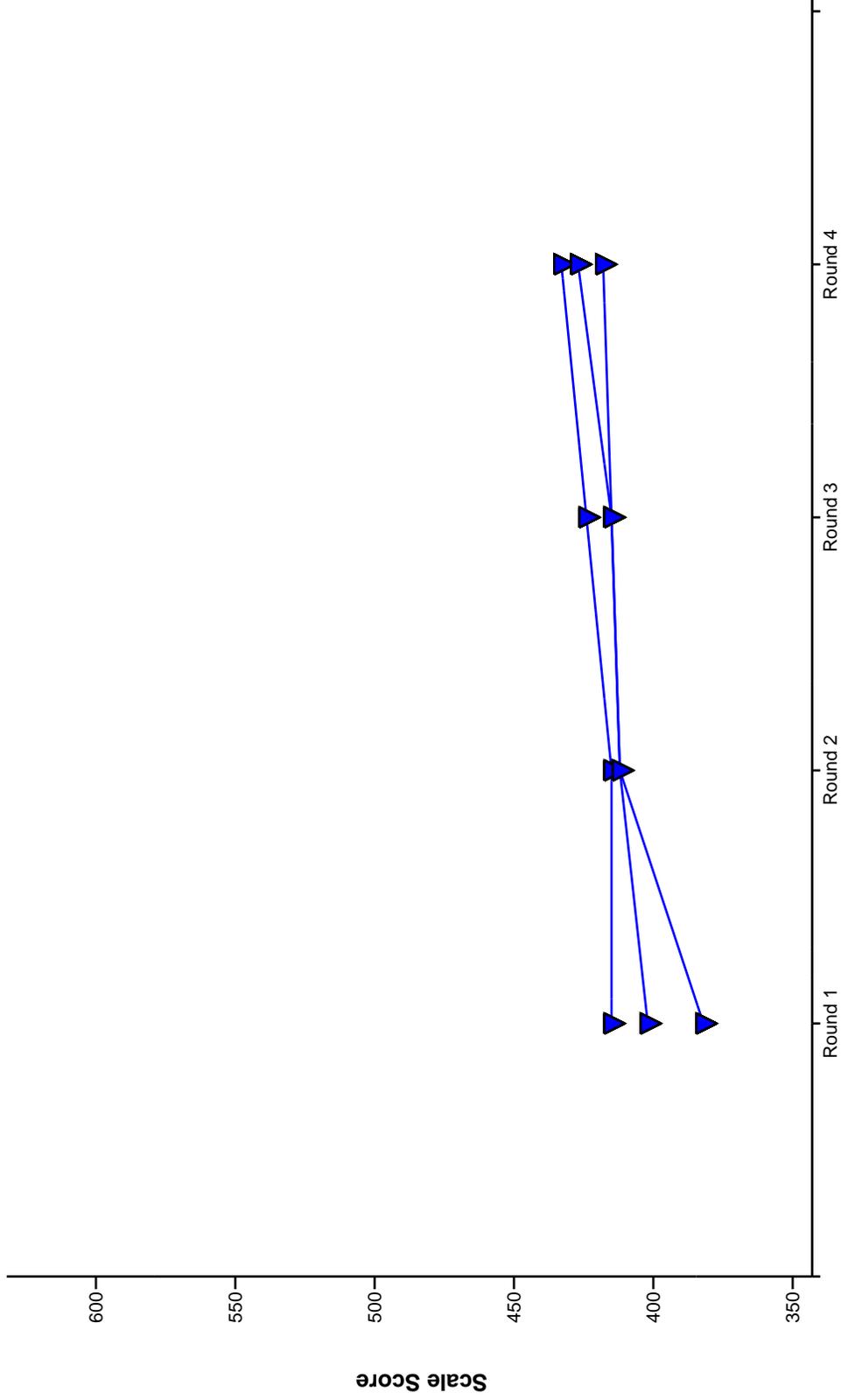
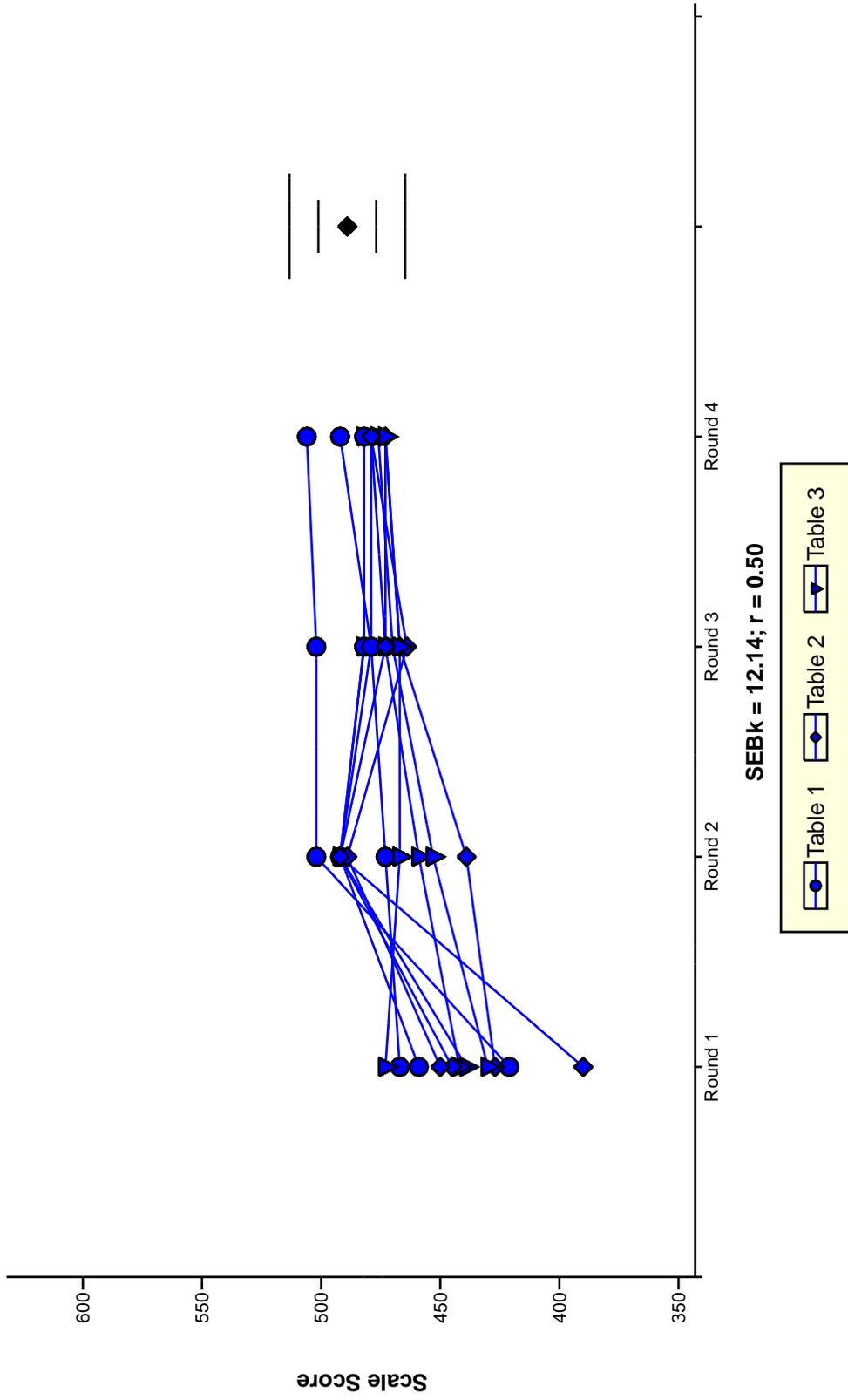


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Meets Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Meets Cut Point

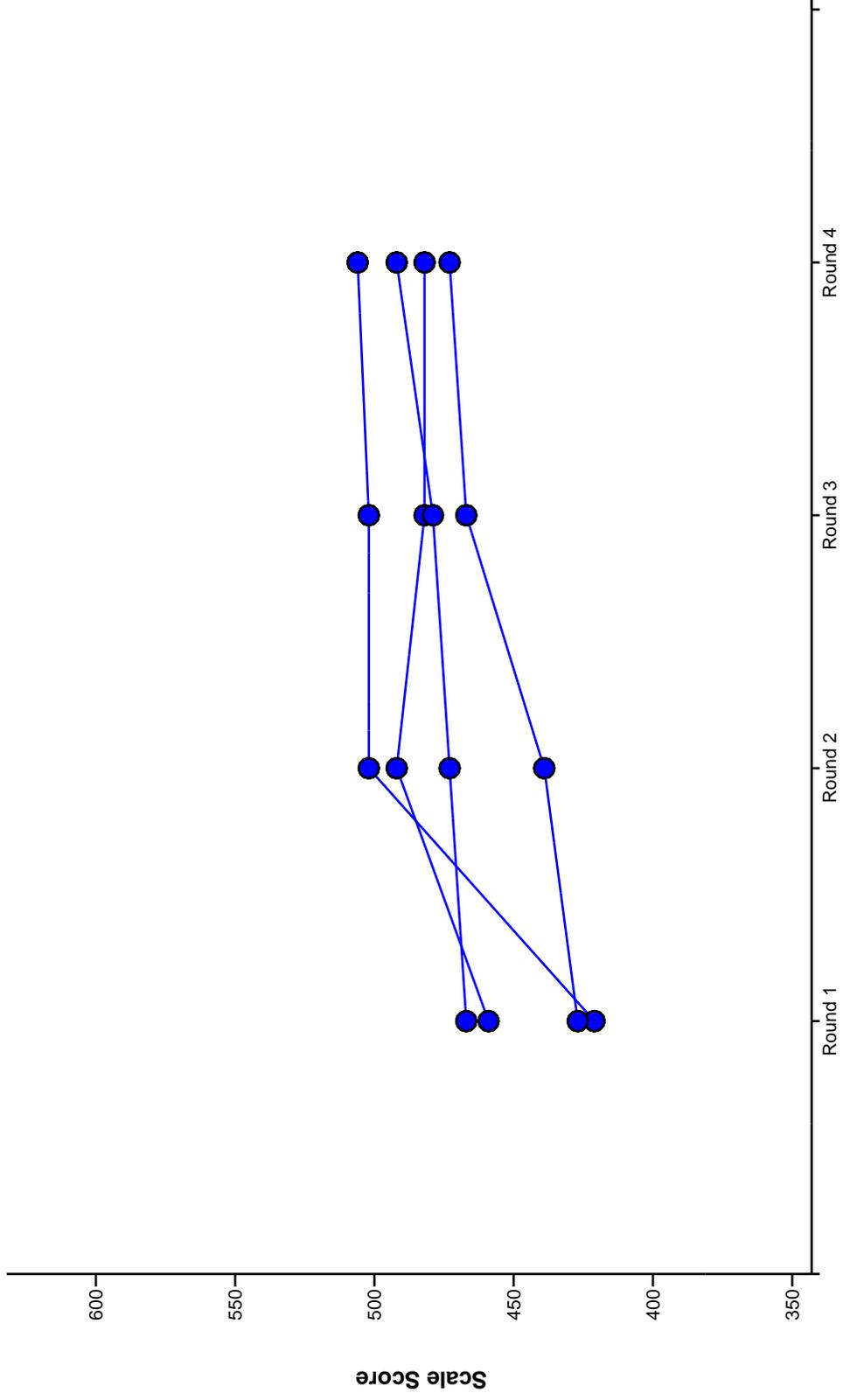


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Meets Cut Point

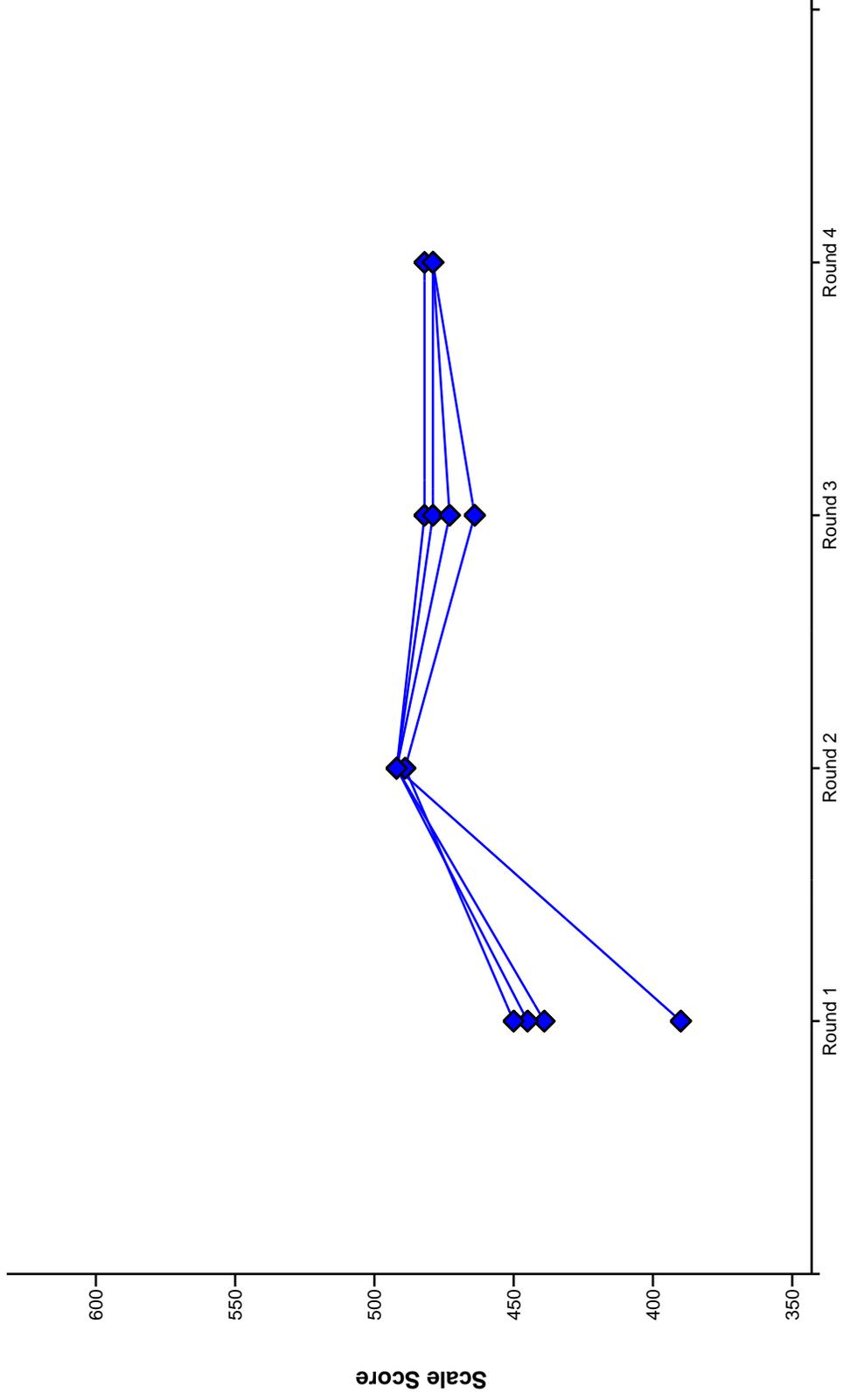


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Meets Cut Point

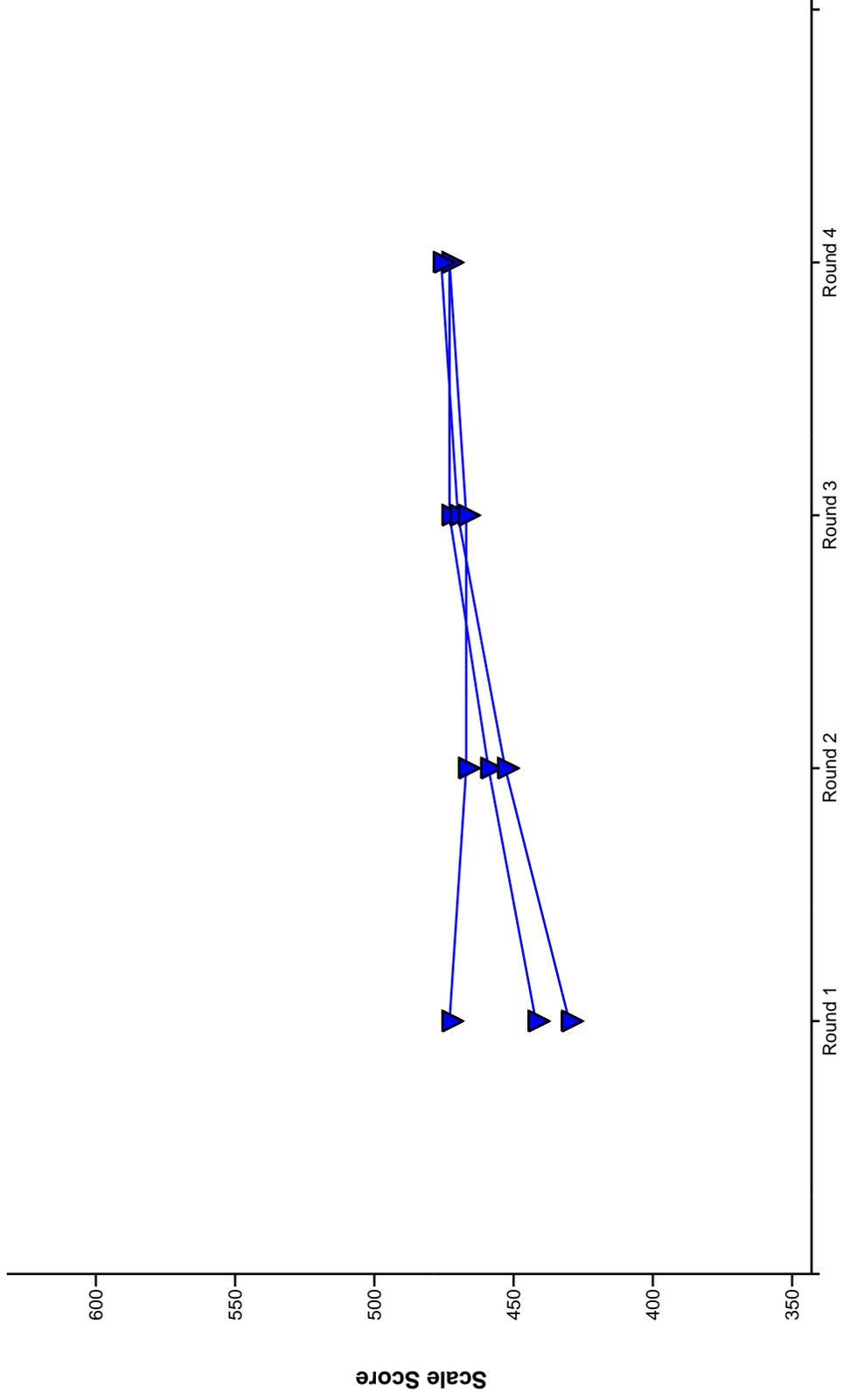
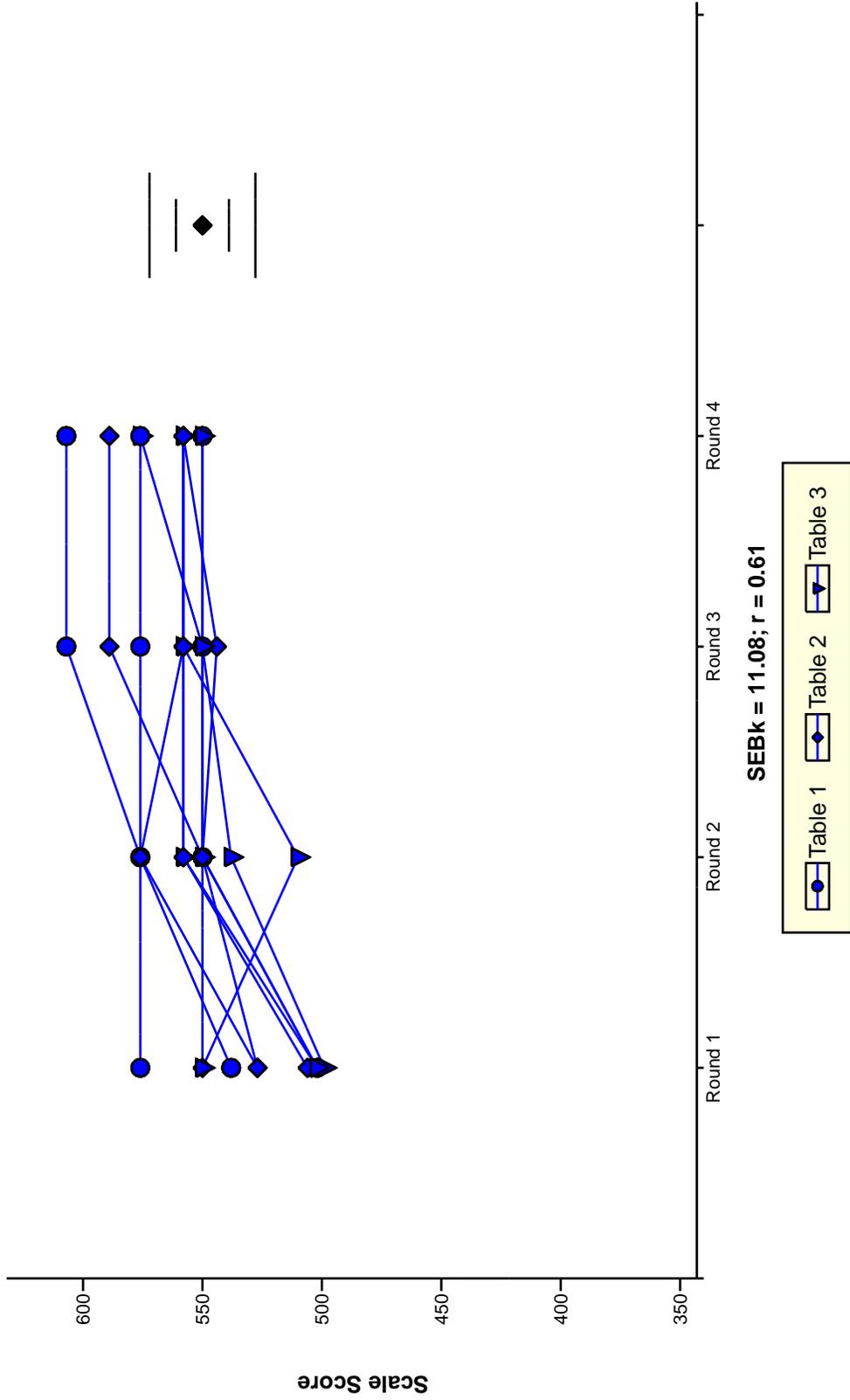


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Exceeds Cut Point

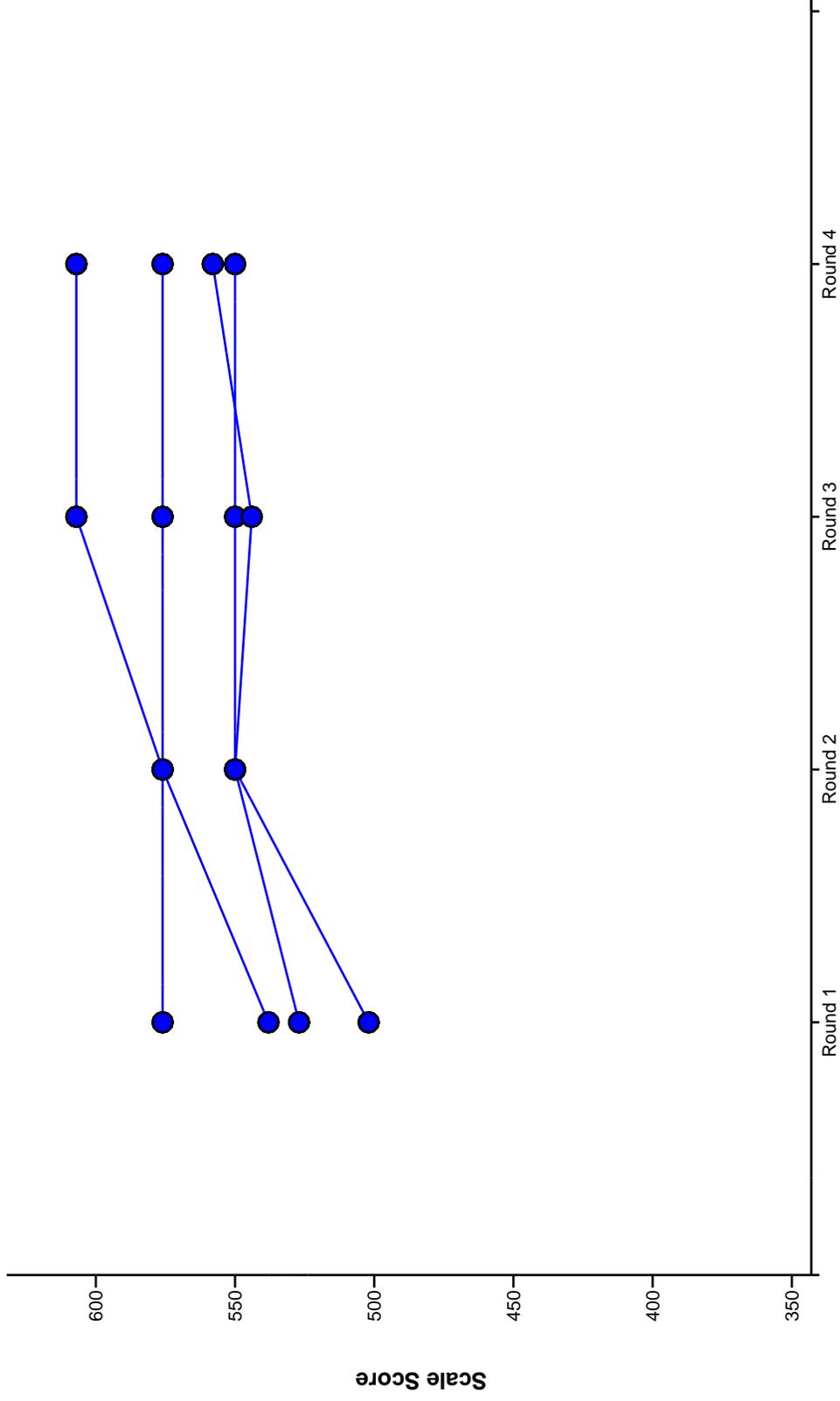


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Exceeds Cut Point

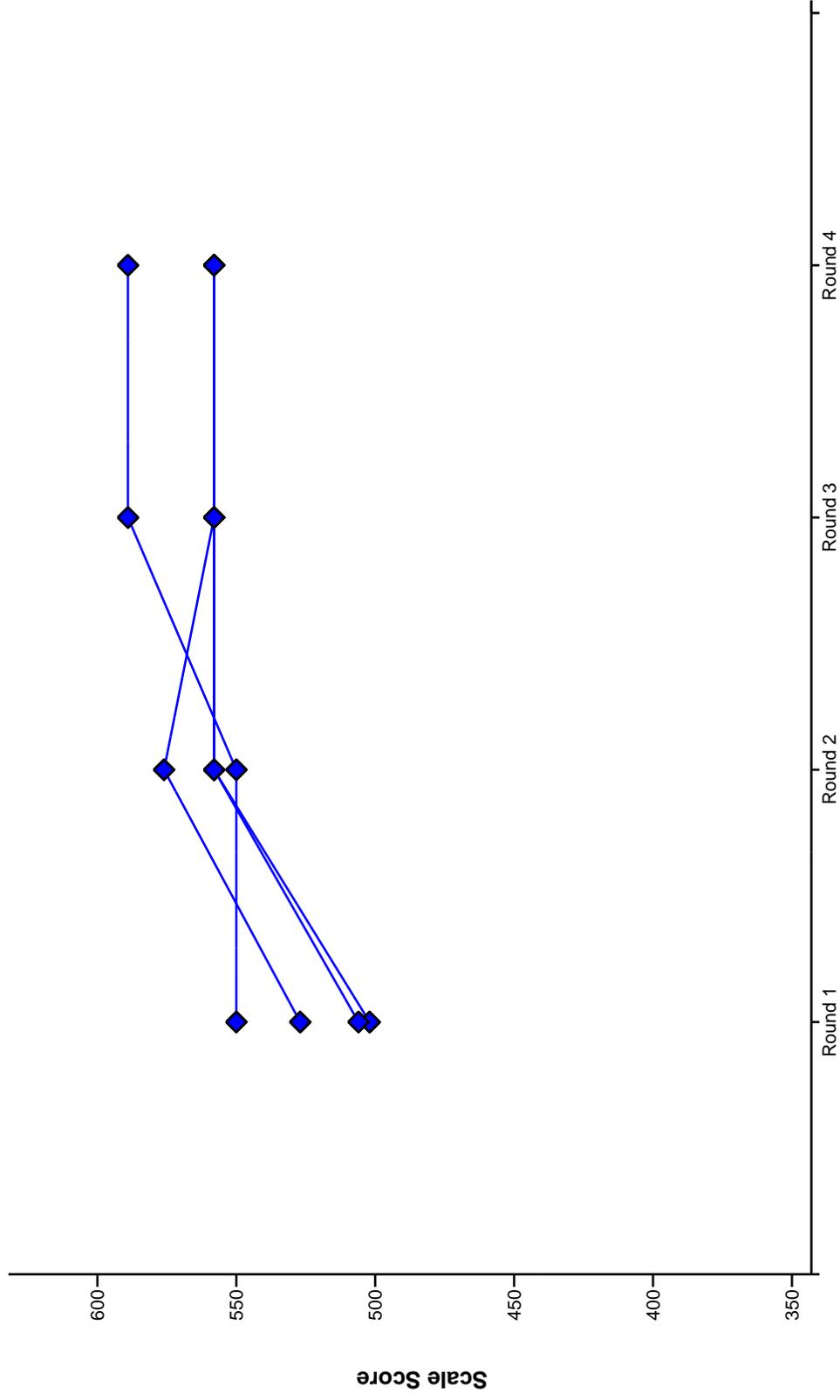


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 5 Mathematics Exceeds Cut Point

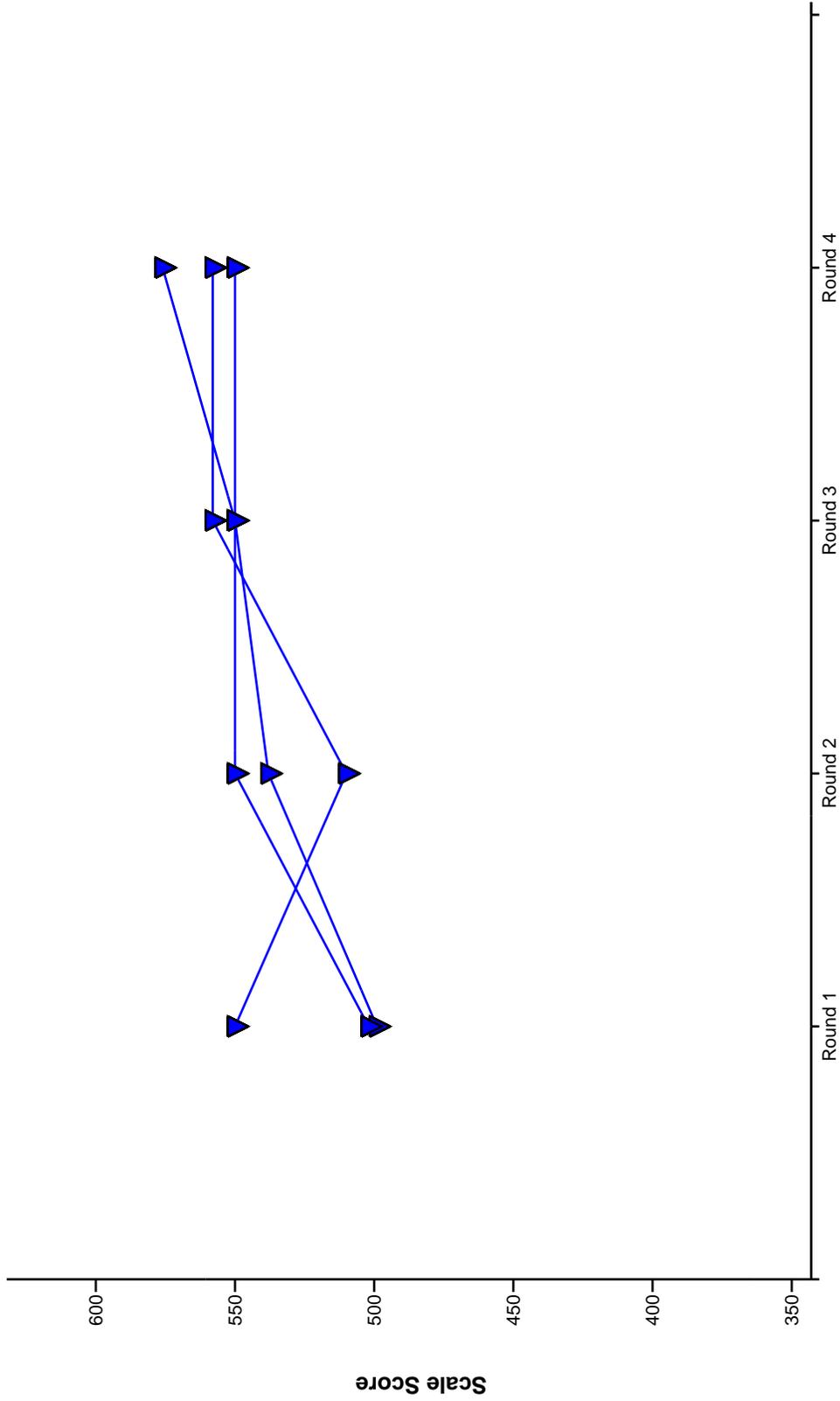
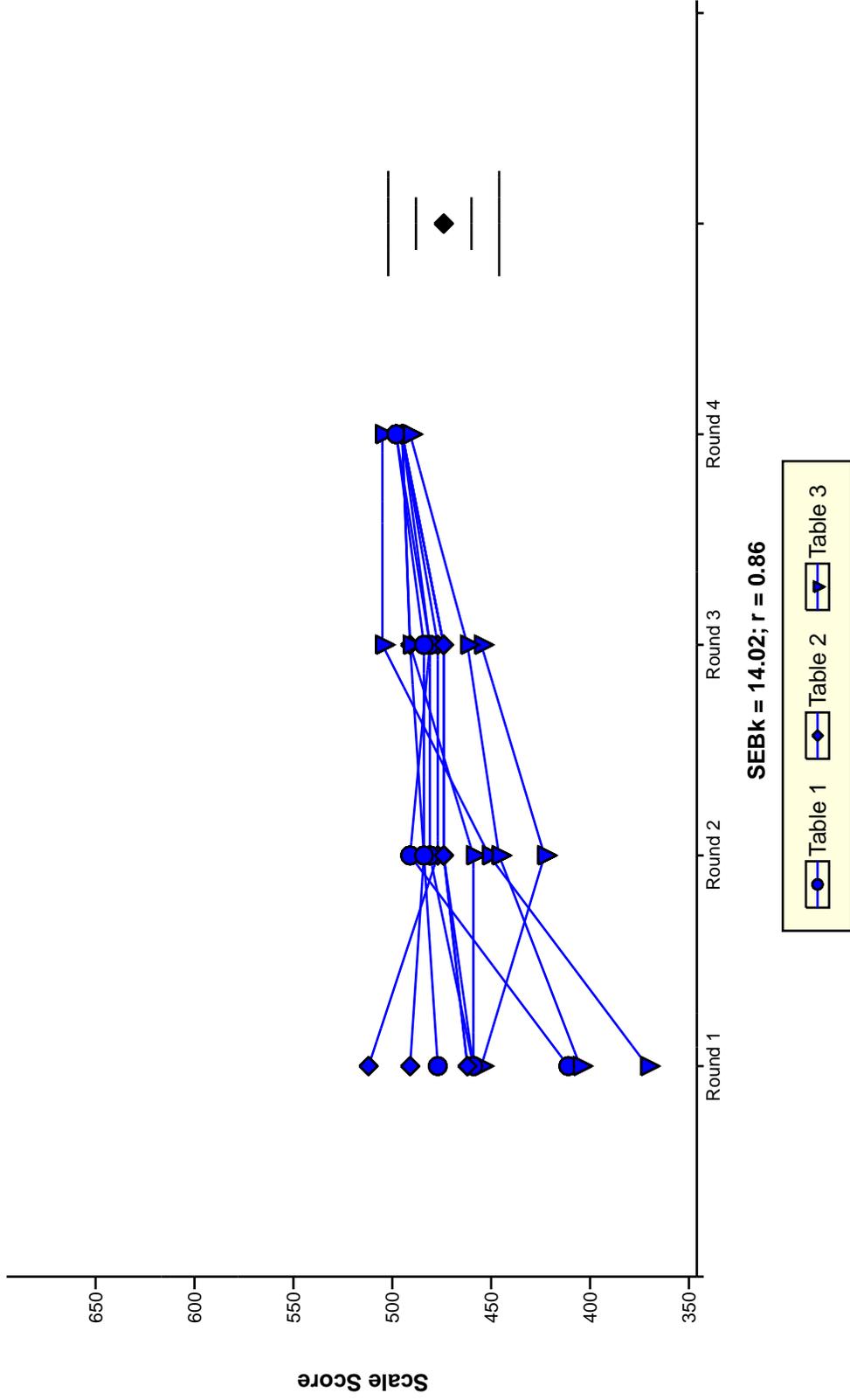


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Approaches Cut Point

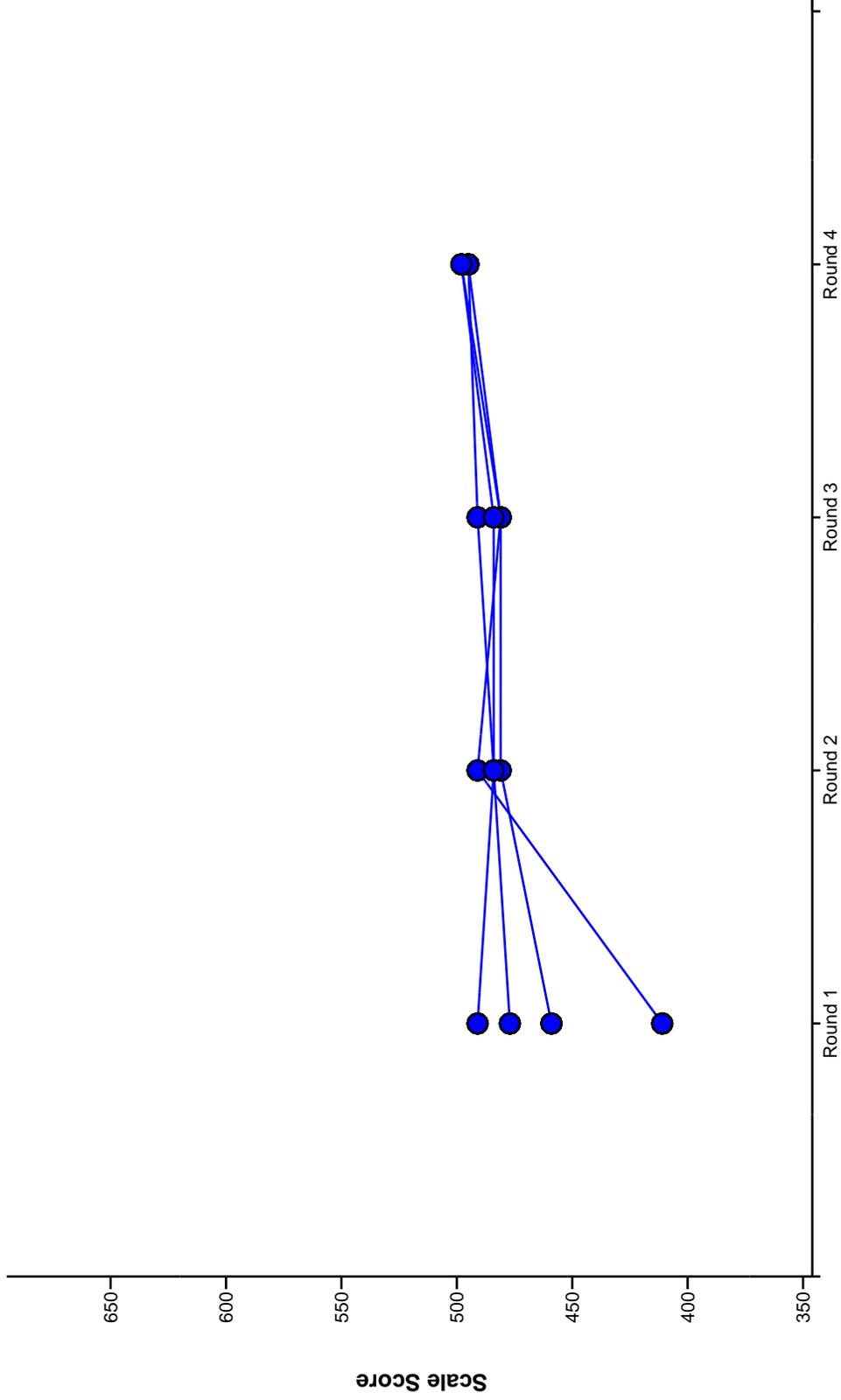


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Approaches Cut Point

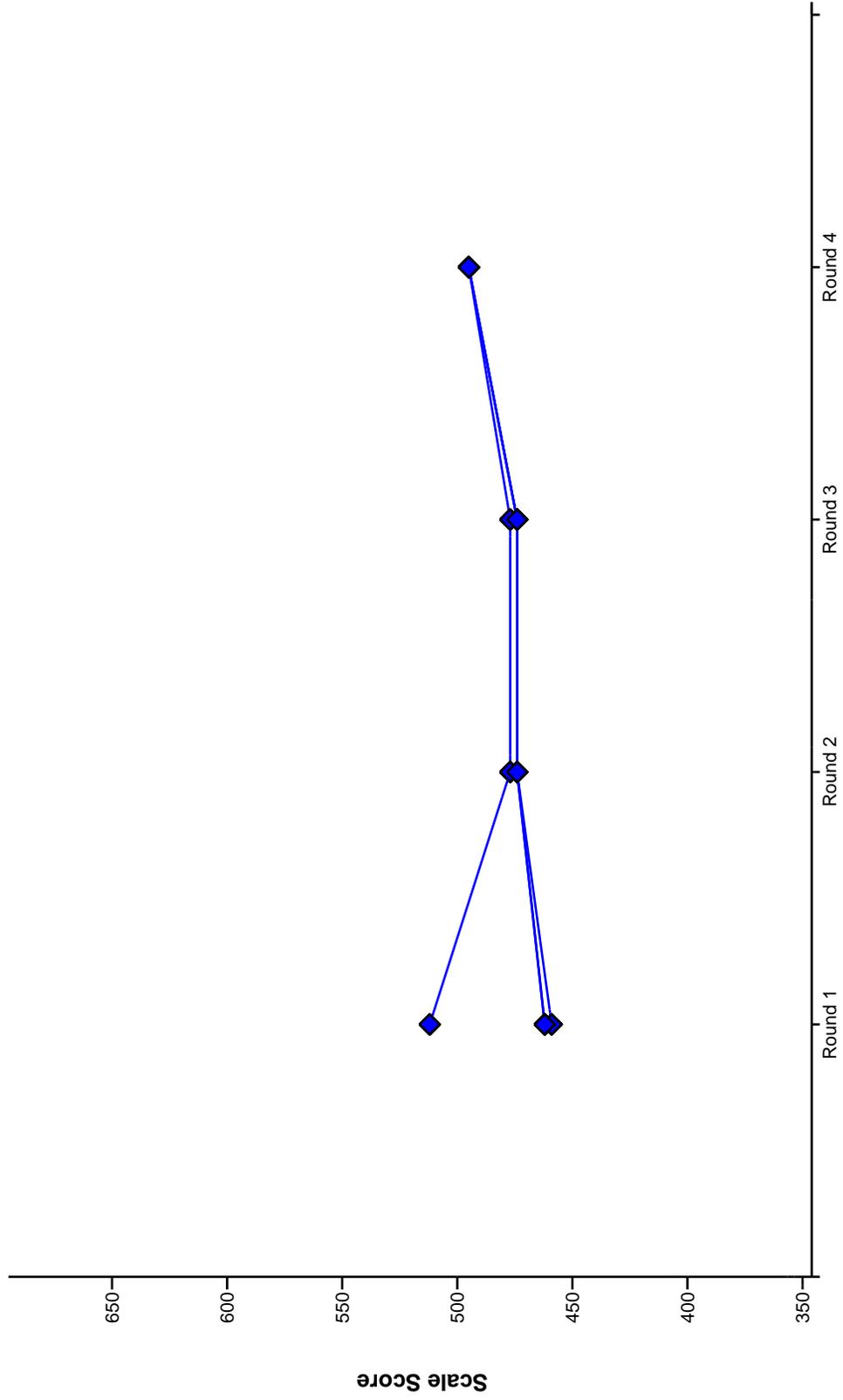


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Approaches Cut Point

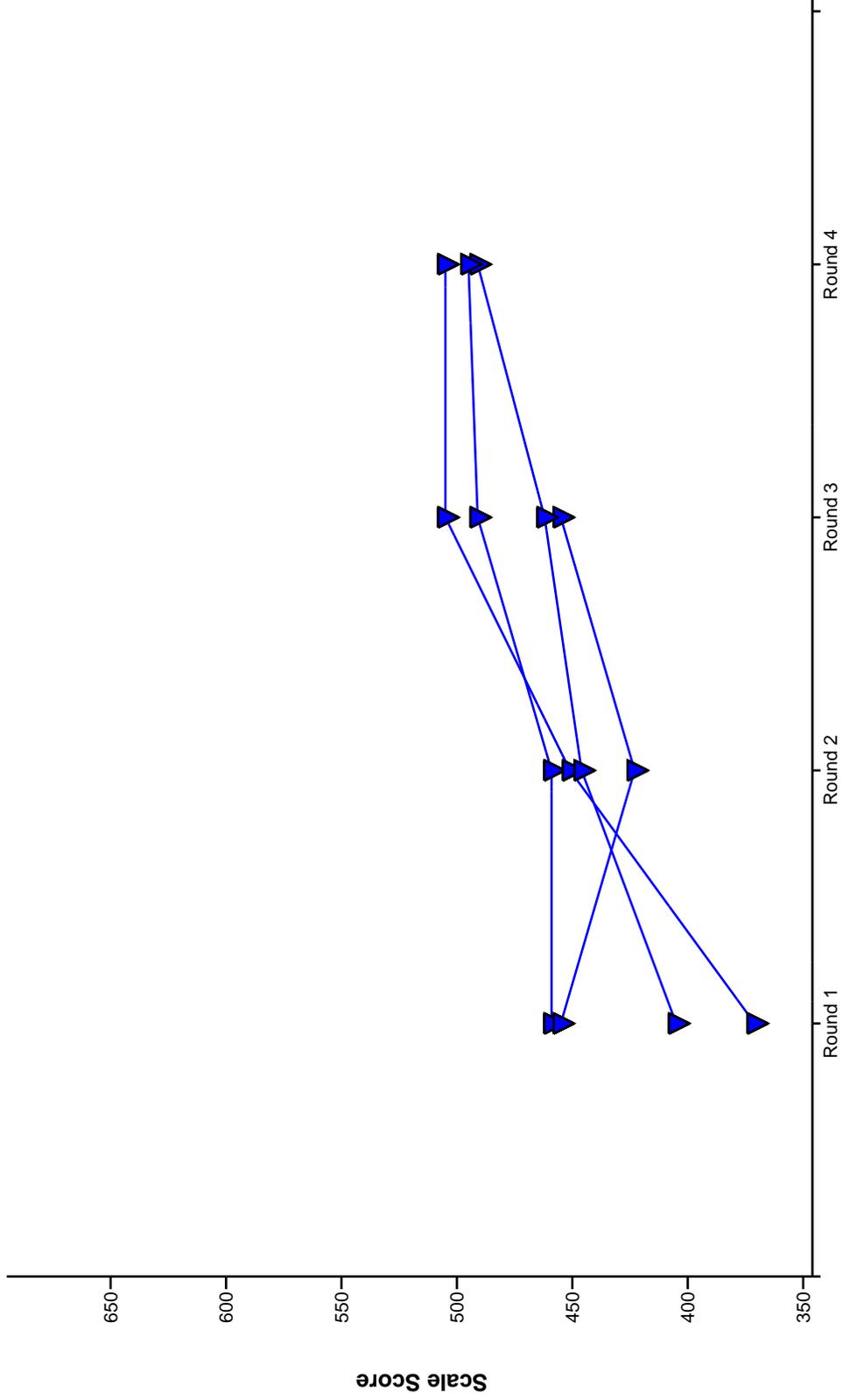
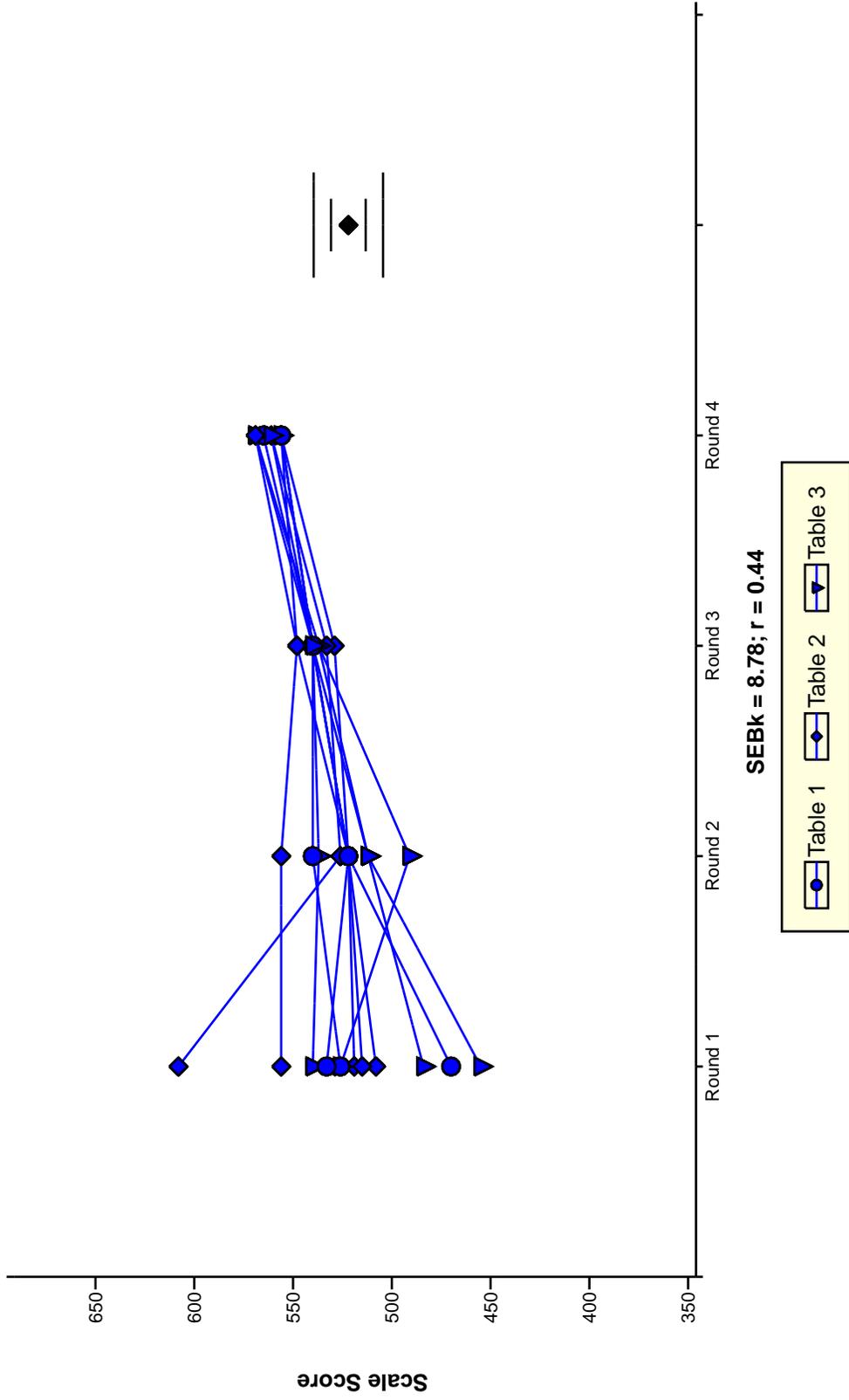


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Meets Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Meets Cut Point

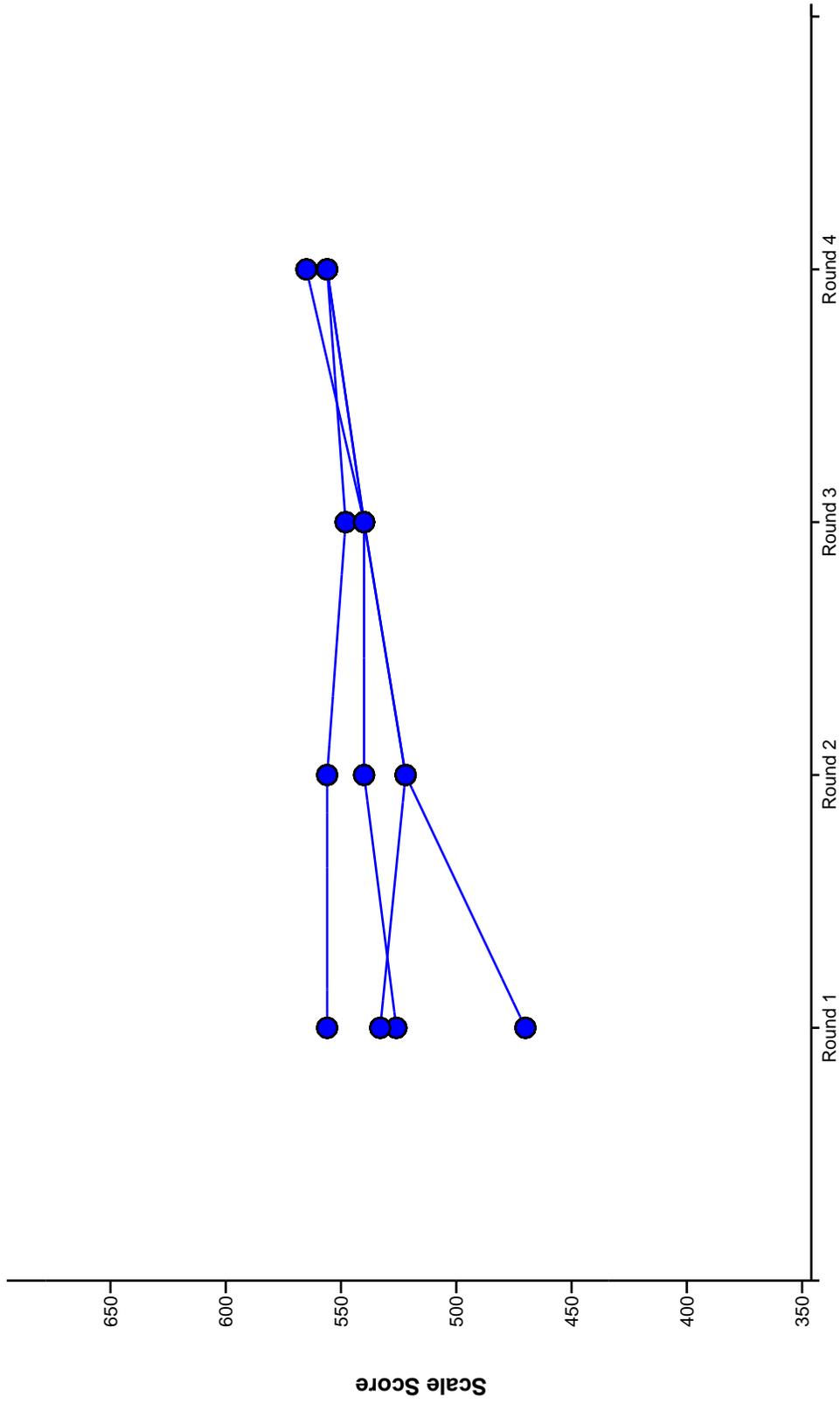


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Meets Cut Point

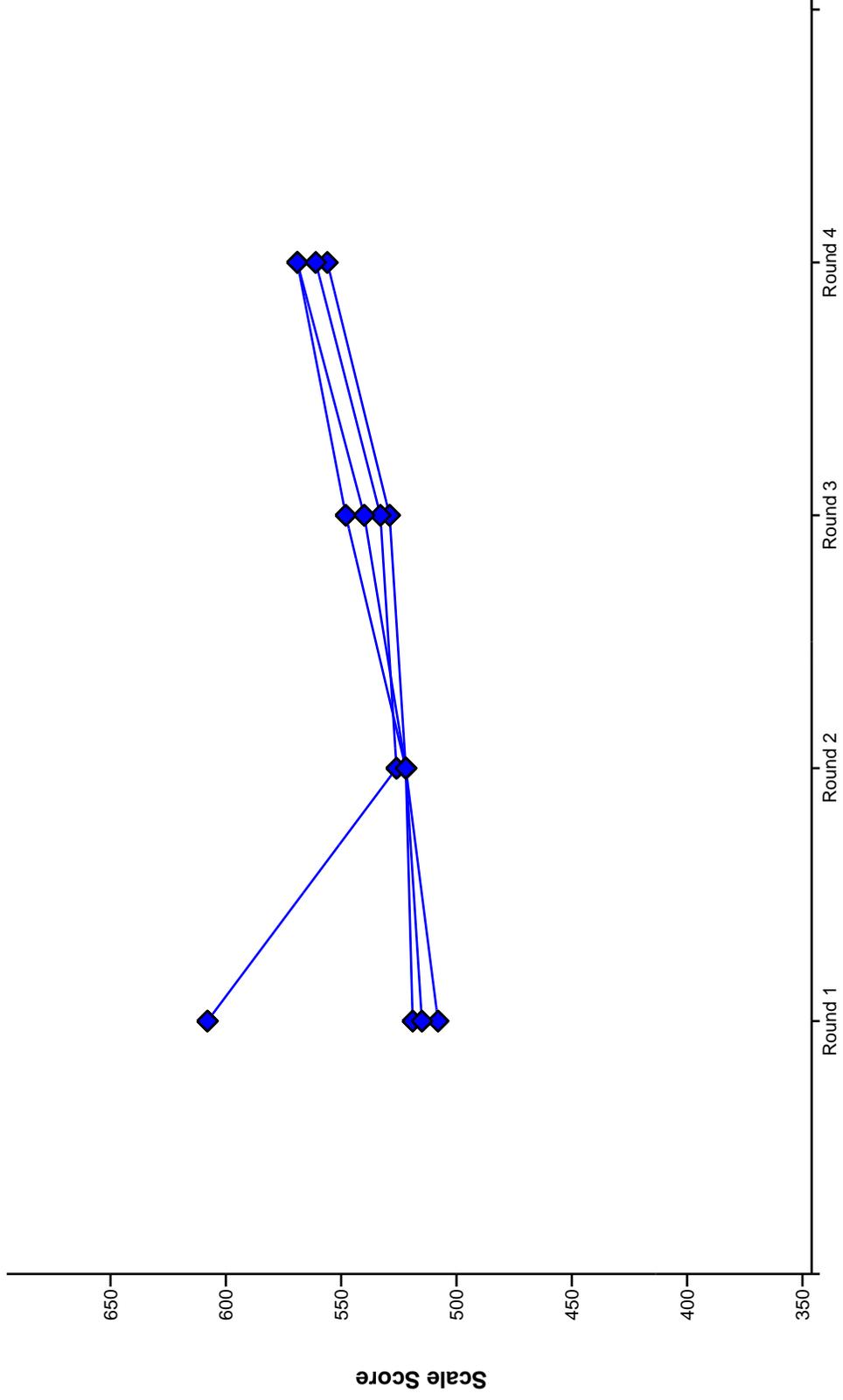


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Meets Cut Point

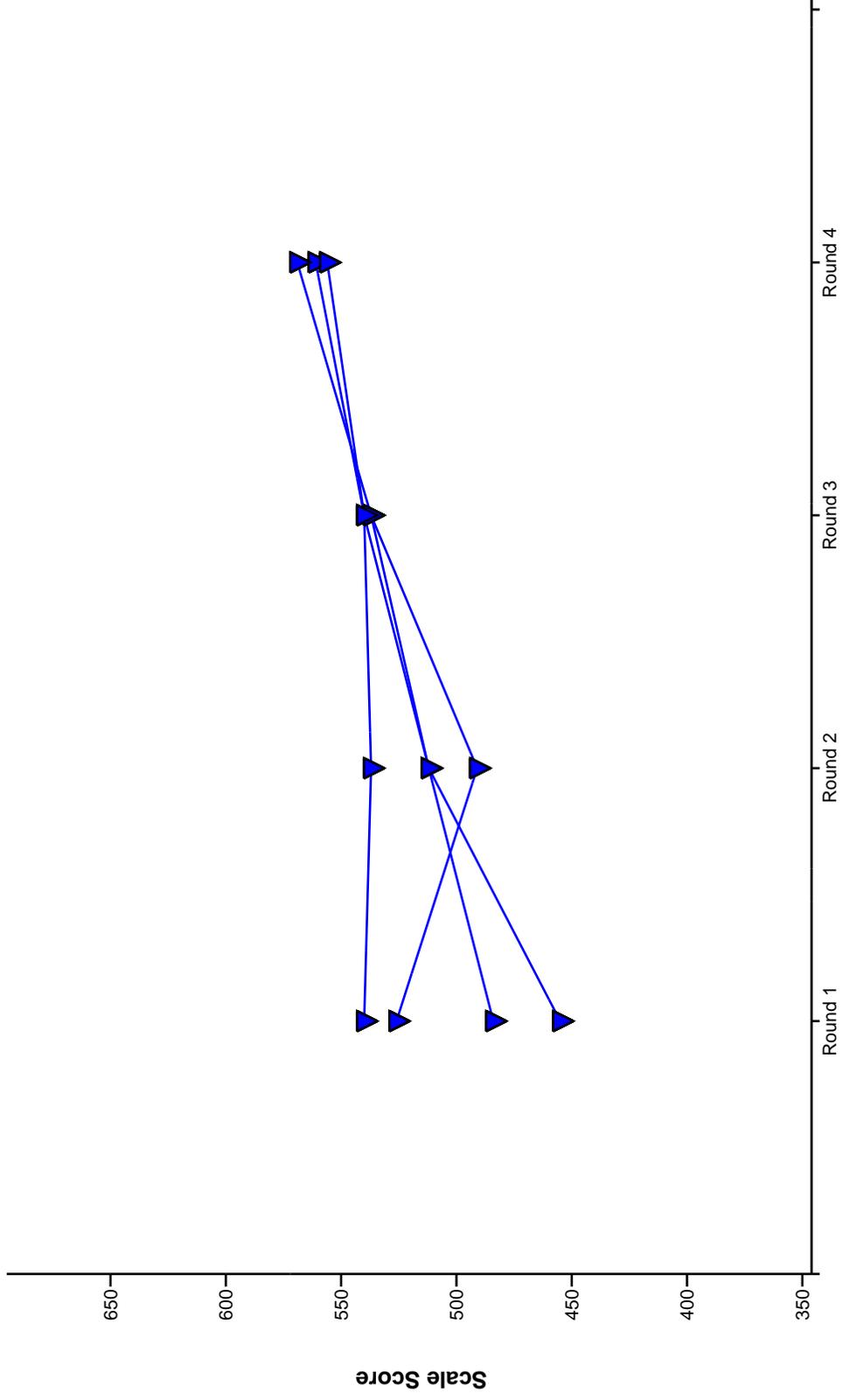
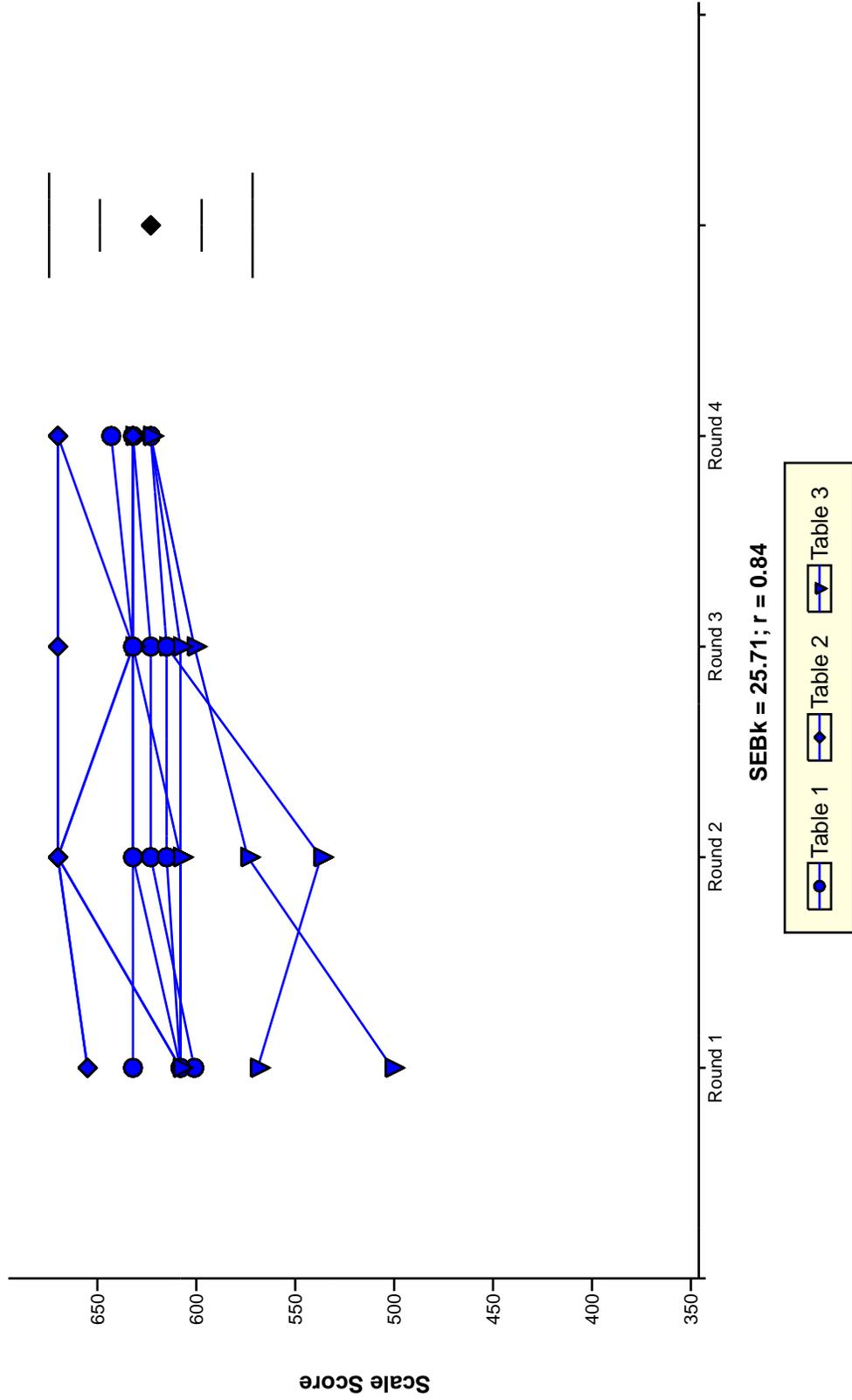


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Exceeds Cut Point

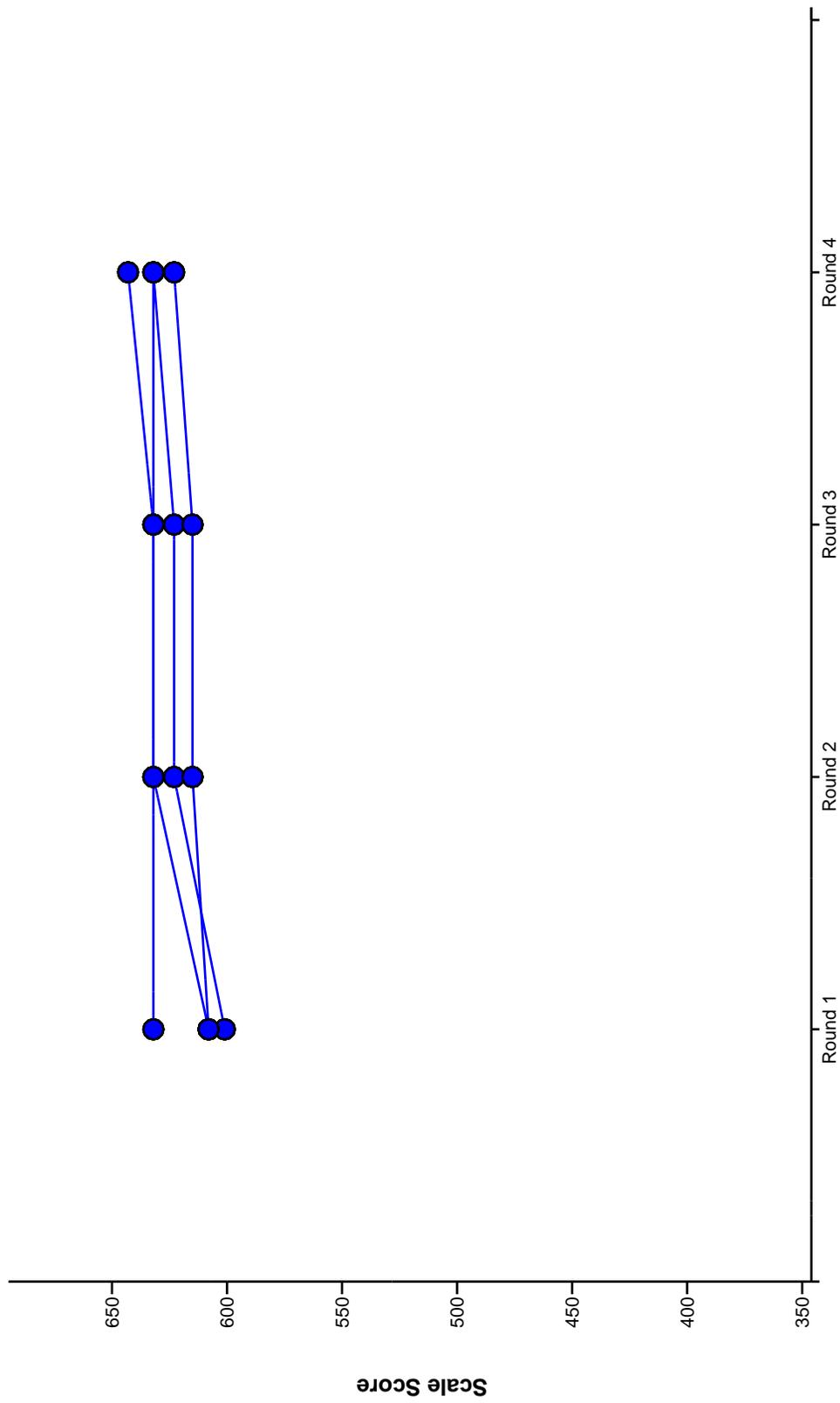


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Exceeds Cut Point

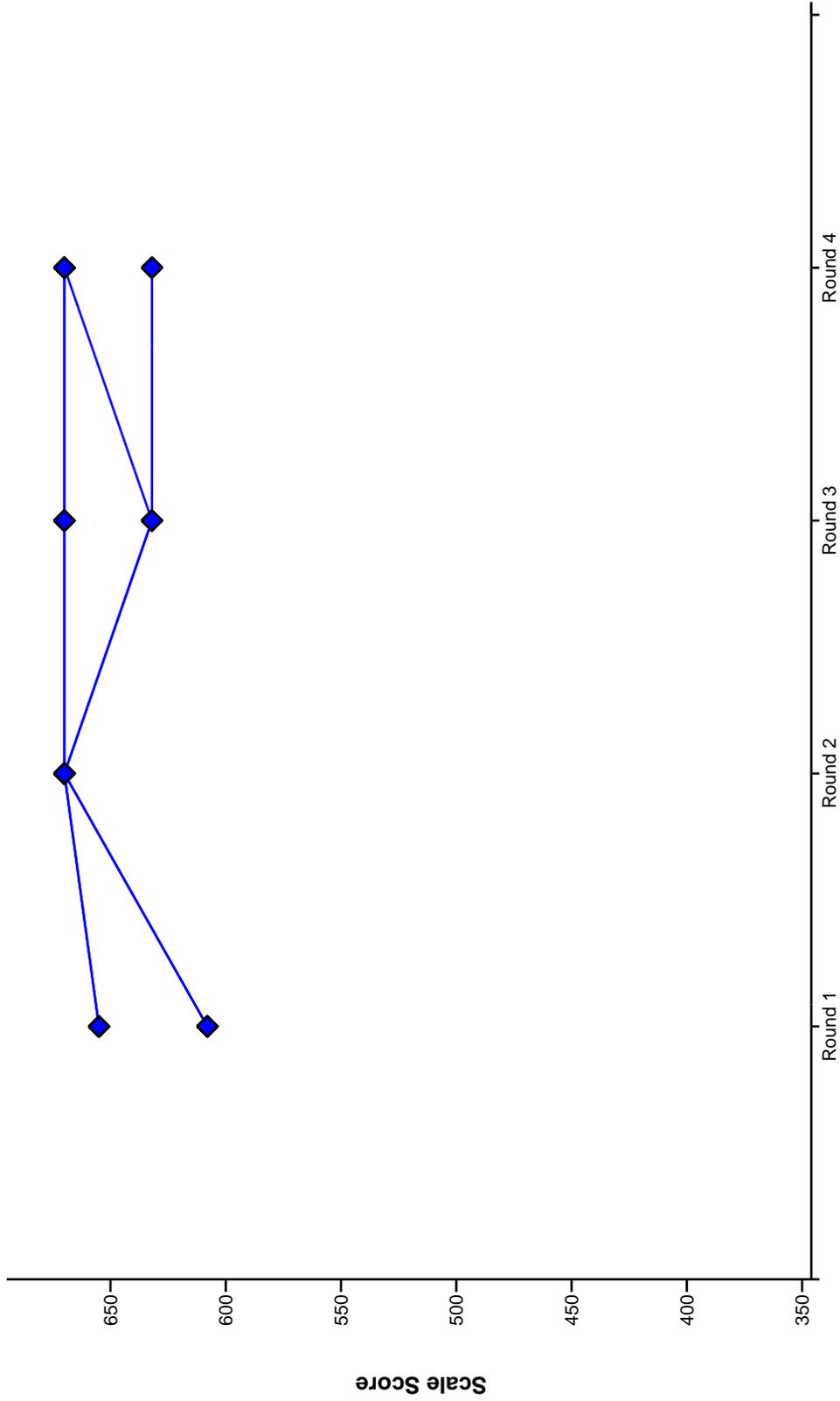


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 8 Mathematics Exceeds Cut Point

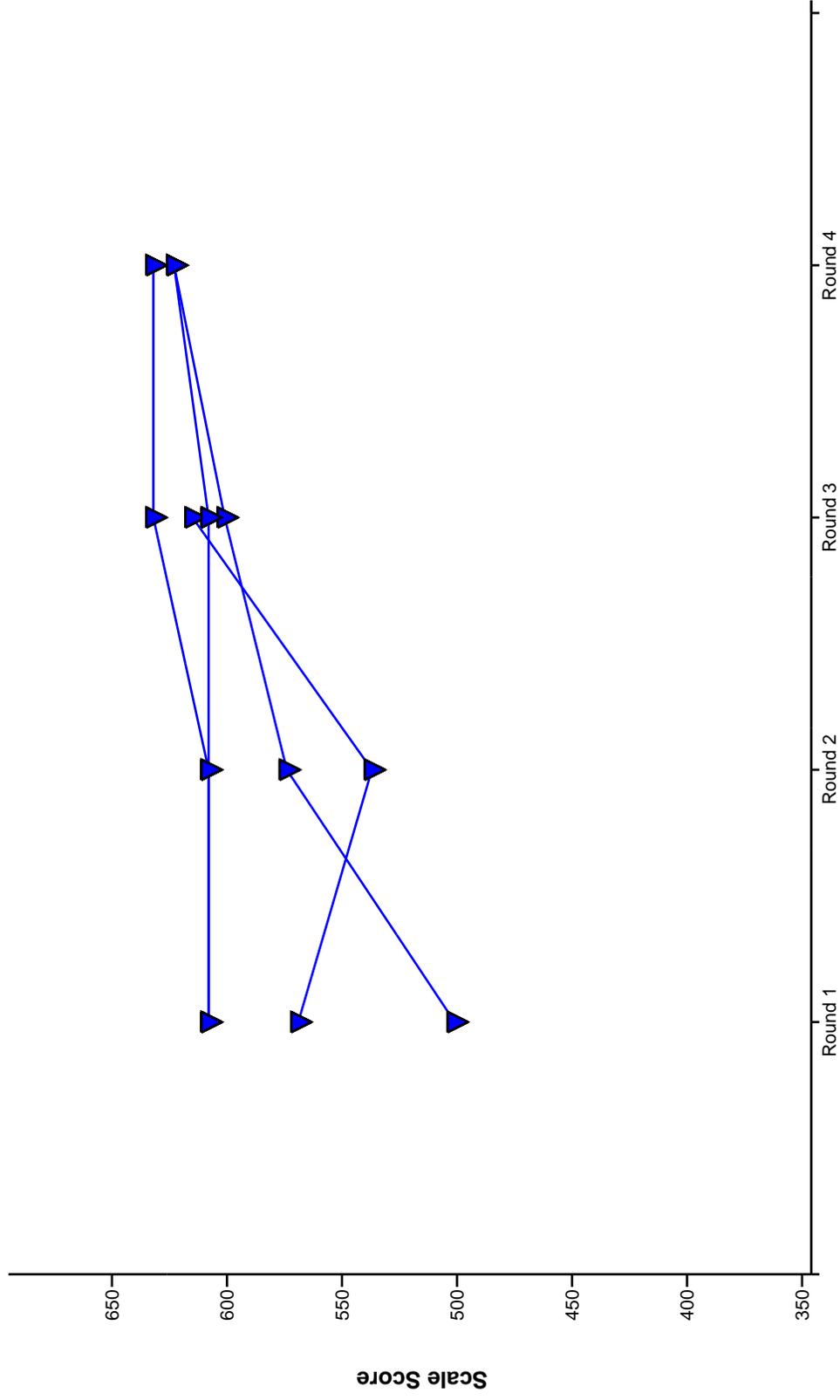
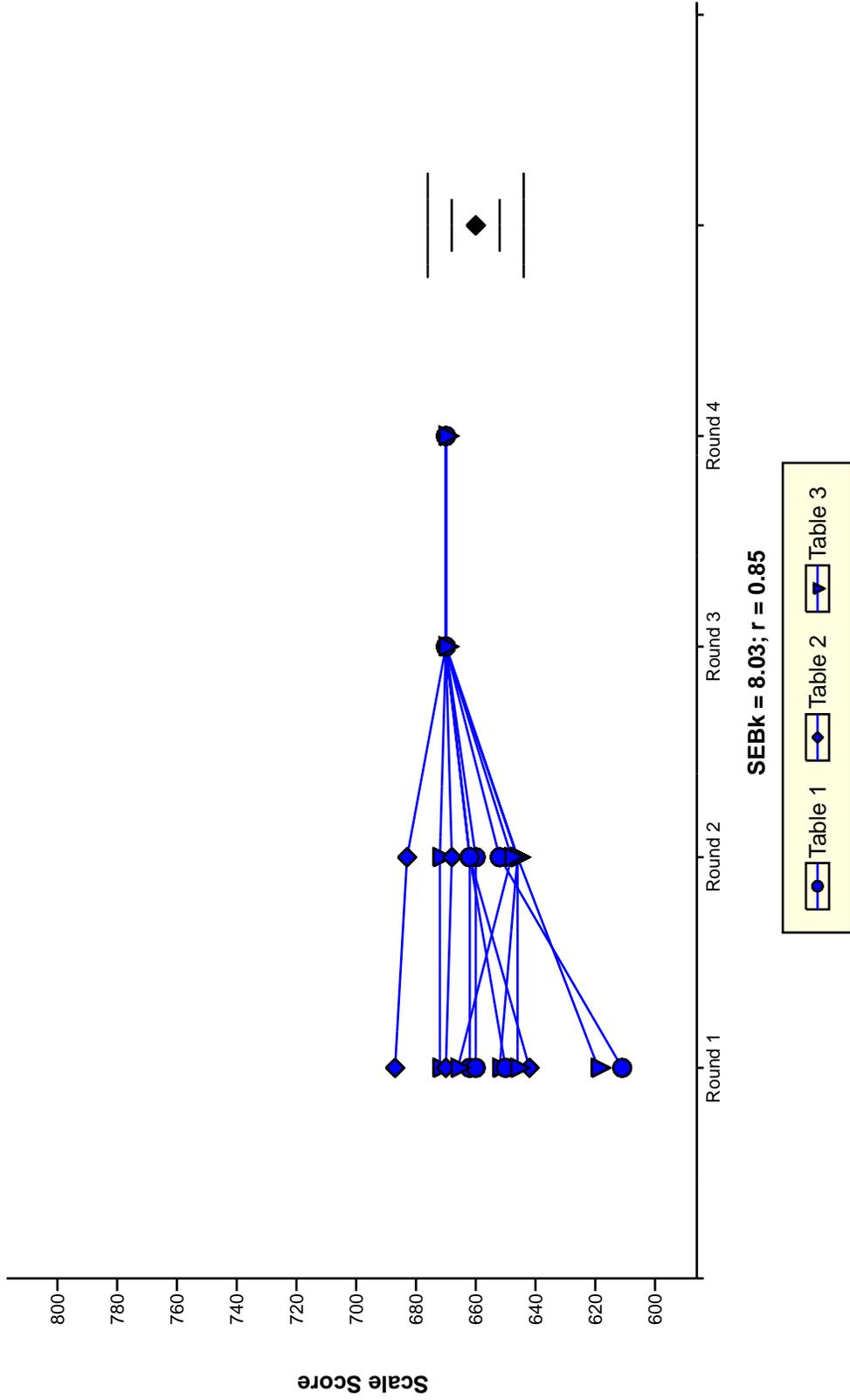


Table 3

AIMS Bookmark Standard Setting May 2005 High School Mathematics Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 High School Mathematics Approaches Cut Point

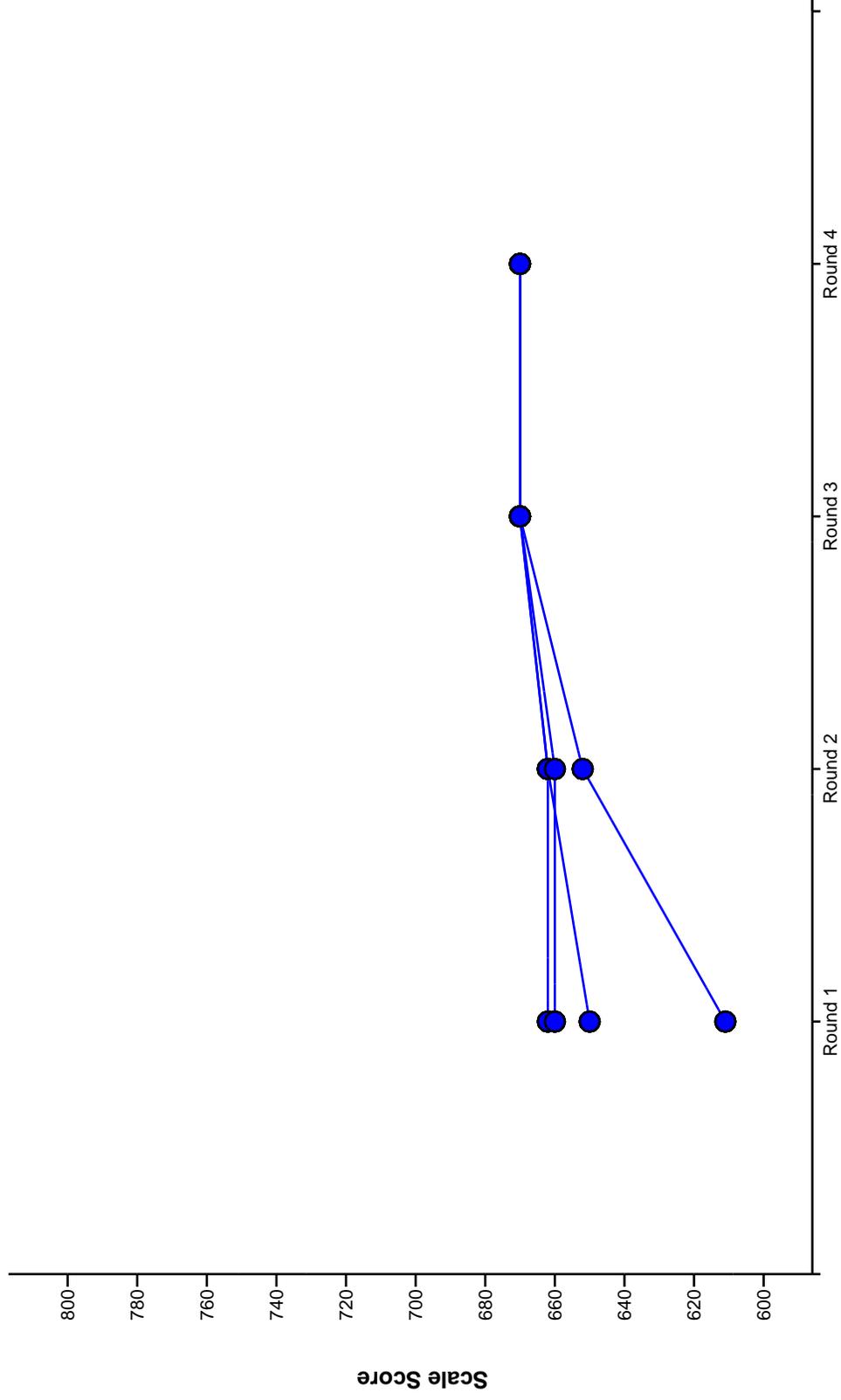


Table 1

AIMS Bookmark Standard Setting May 2005 High School Mathematics Approaches Cut Point

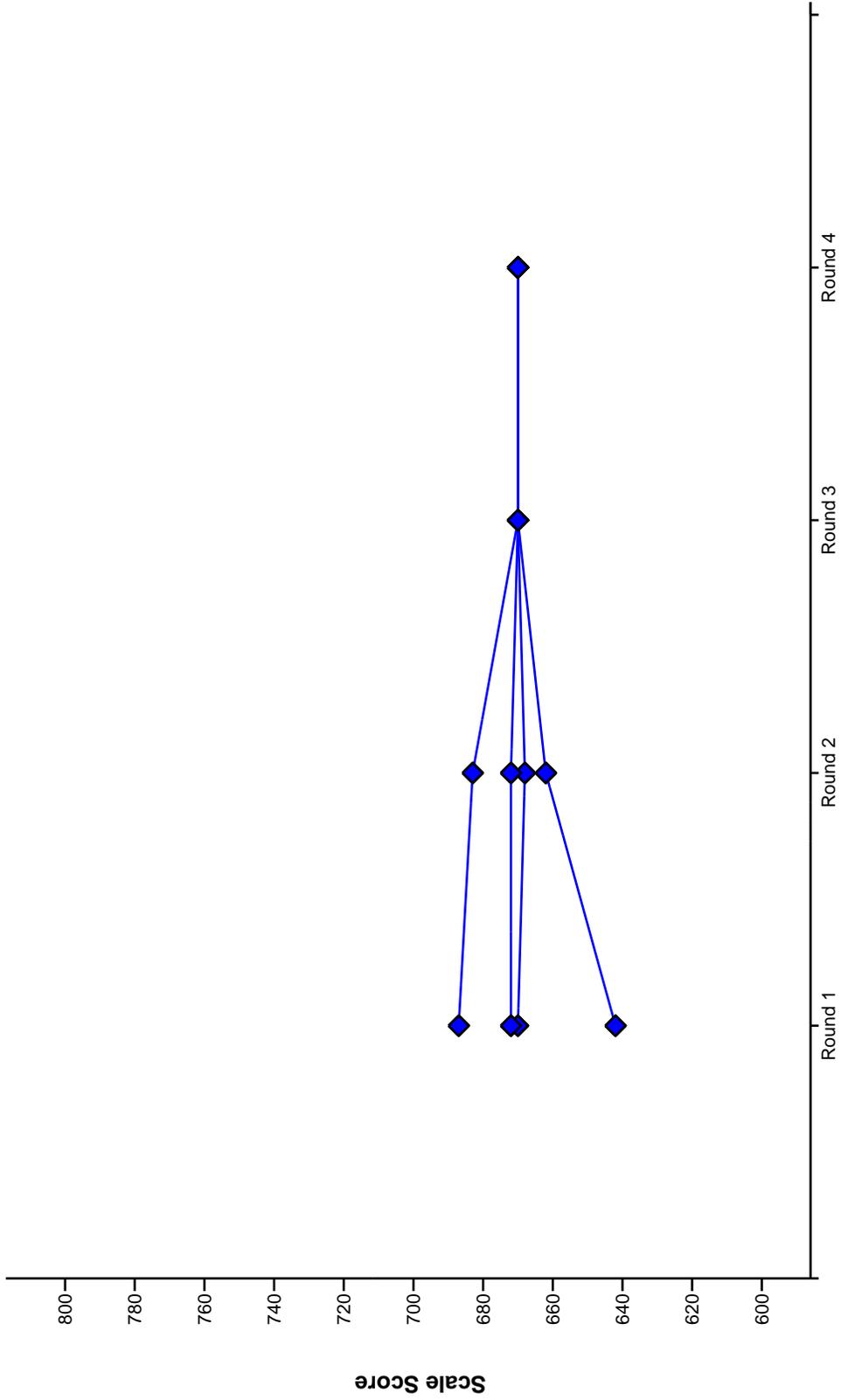


Table 2

AIMS Bookmark Standard Setting May 2005 High School Mathematics Approaches Cut Point

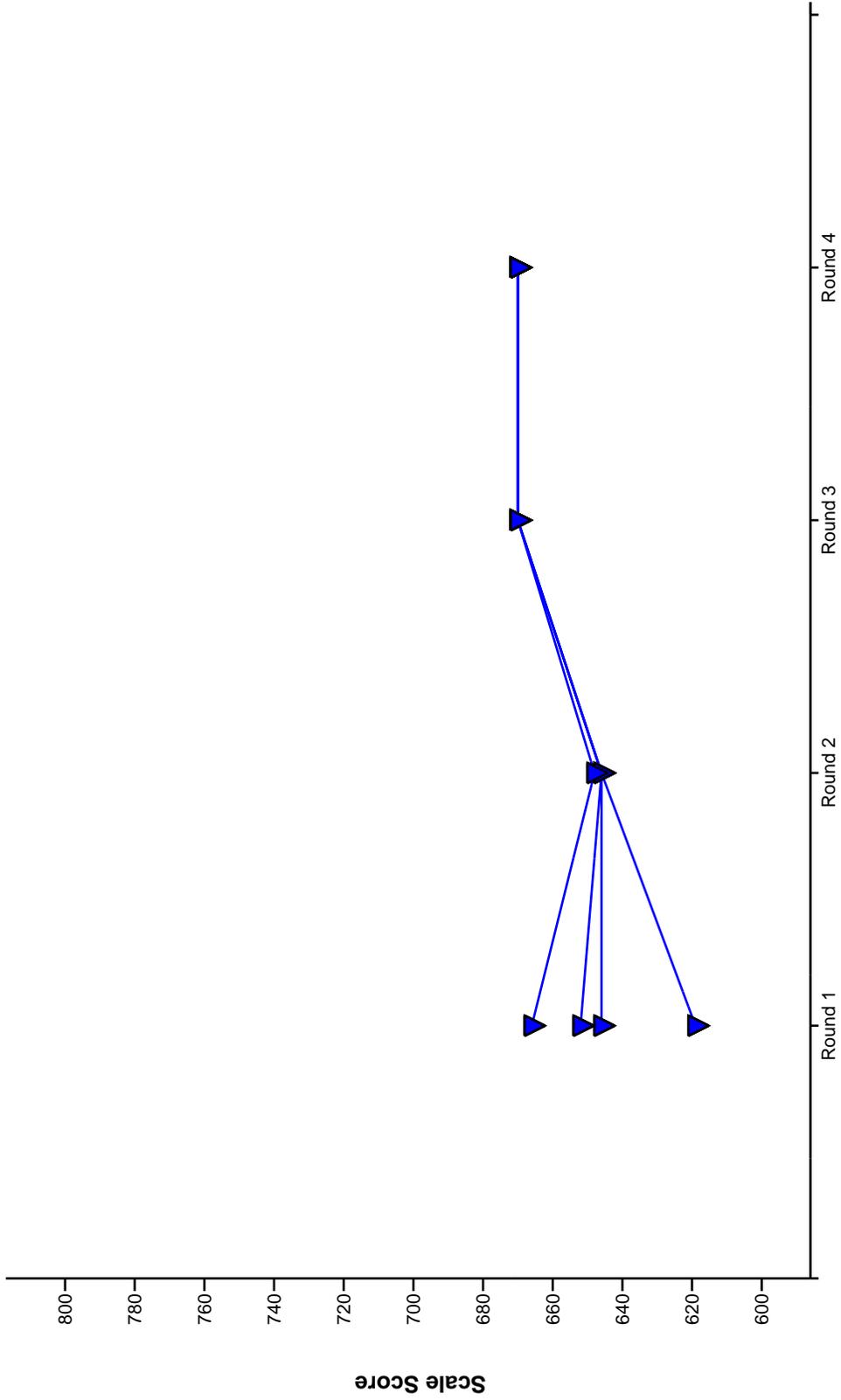
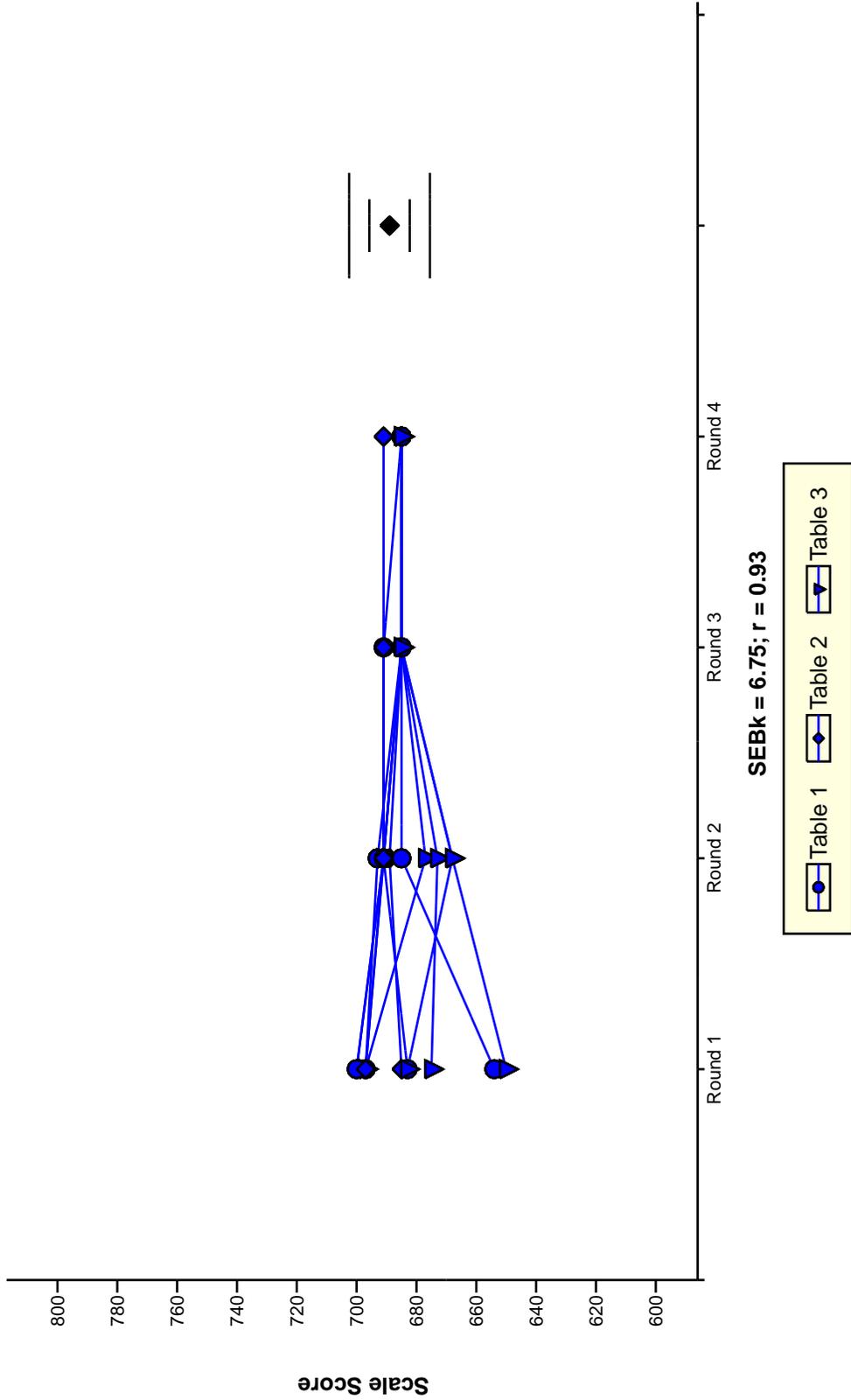


Table 3

AIMS Bookmark Standard Setting May 2005 High School Mathematics Meets Cut Point



AIMS Bookmark Standard Setting May 2005 High School Mathematics Meets Cut Point

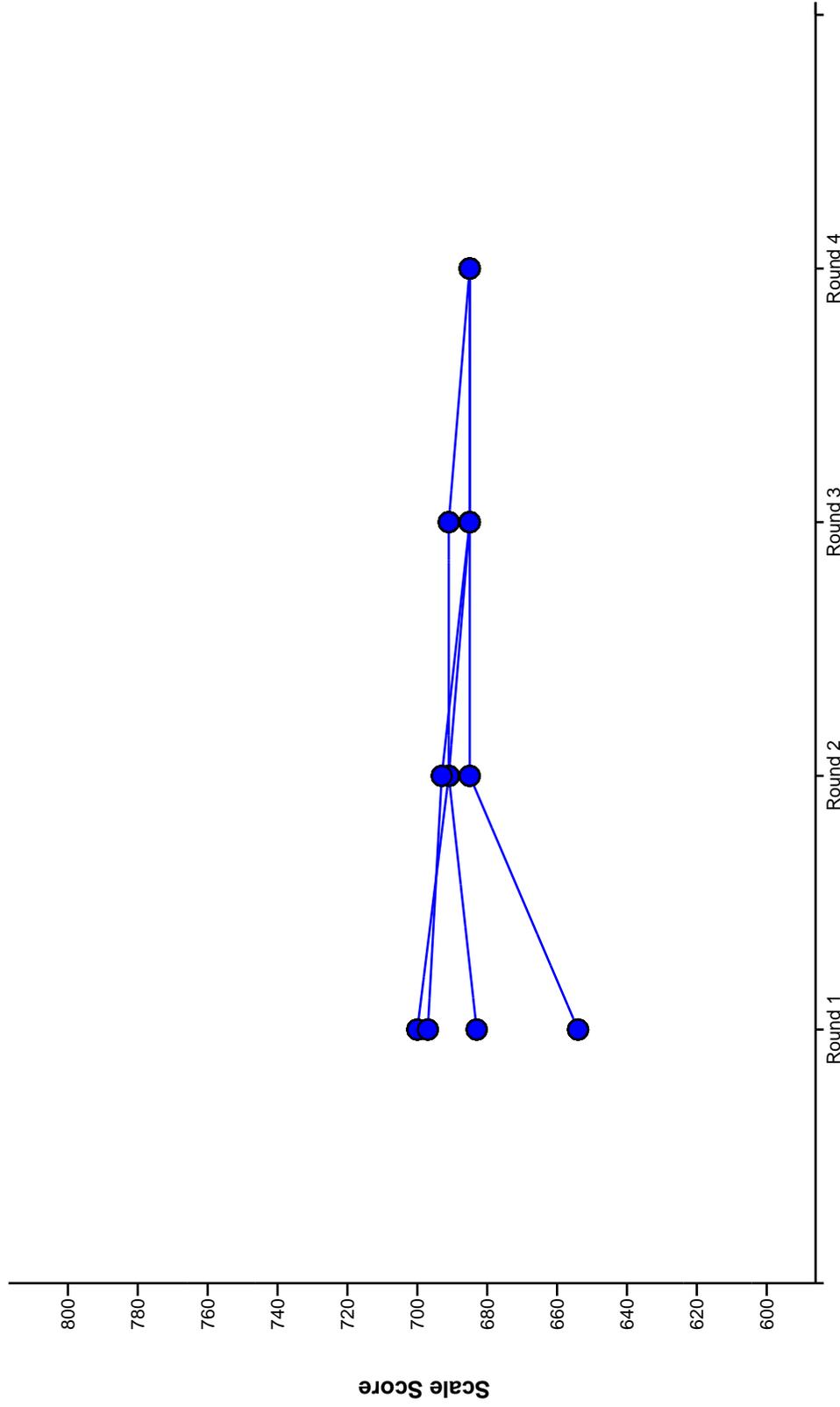


Table 1

AIMS Bookmark Standard Setting May 2005 High School Mathematics Meets Cut Point

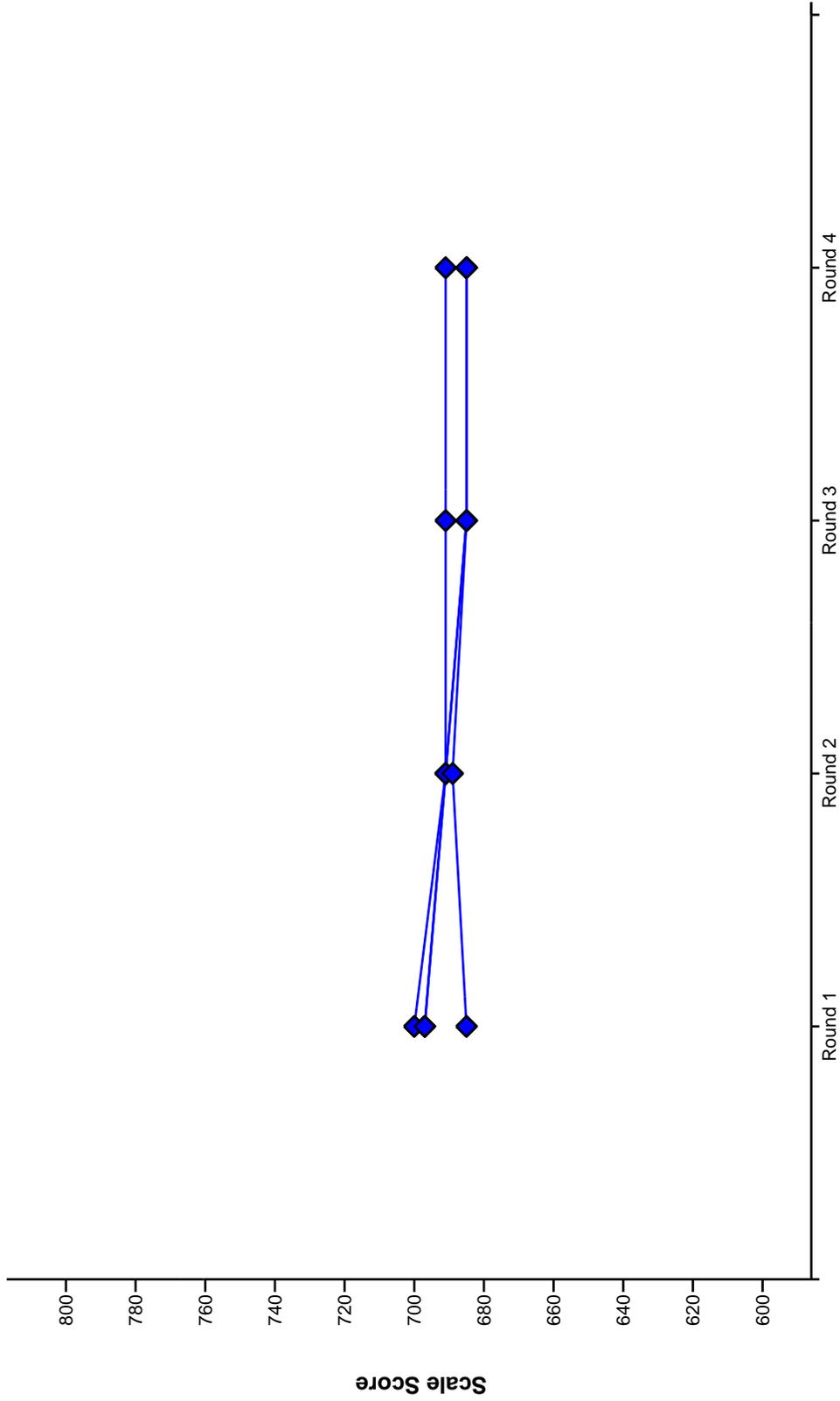


Table 2

AIMS Bookmark Standard Setting May 2005 High School Mathematics Meets Cut Point

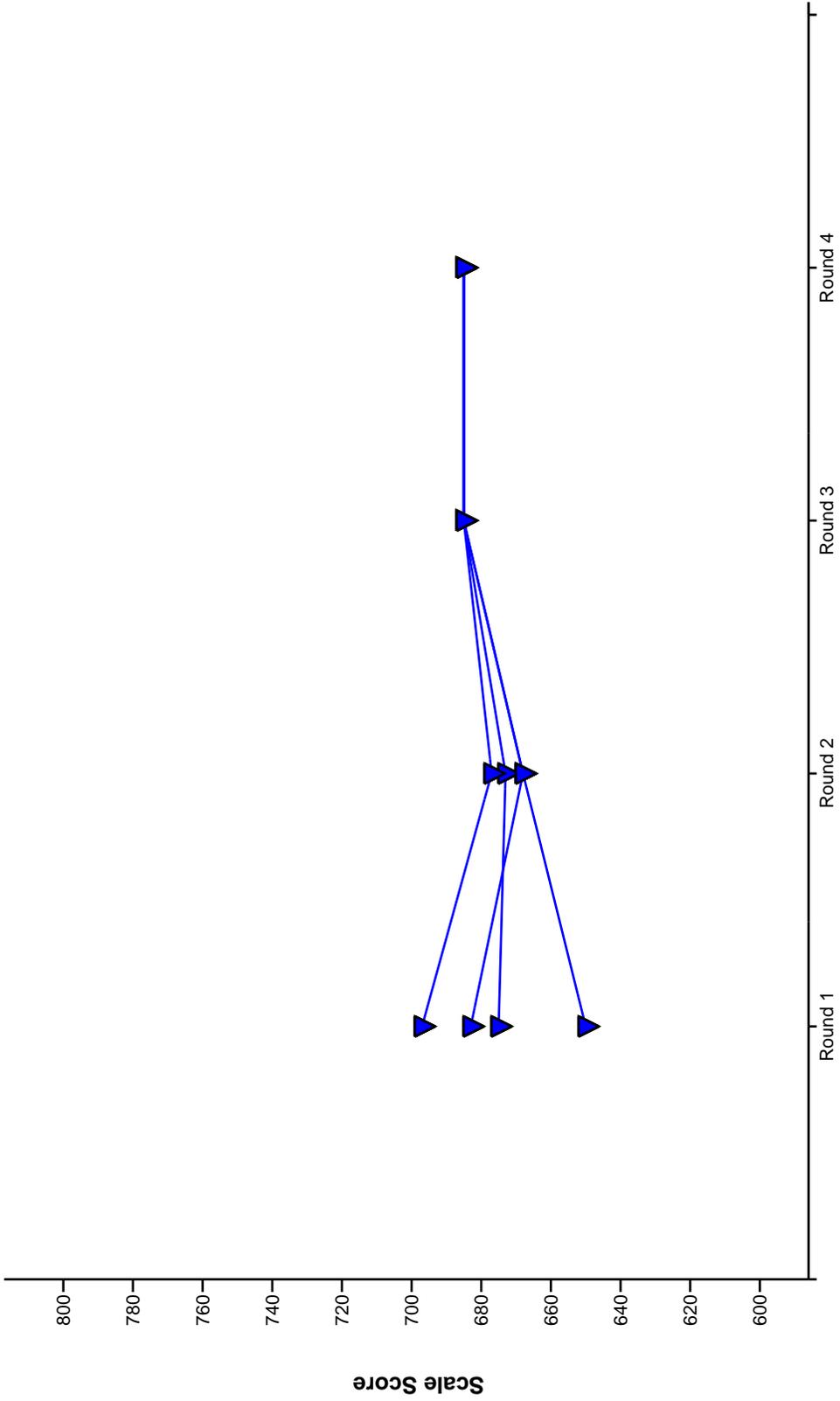
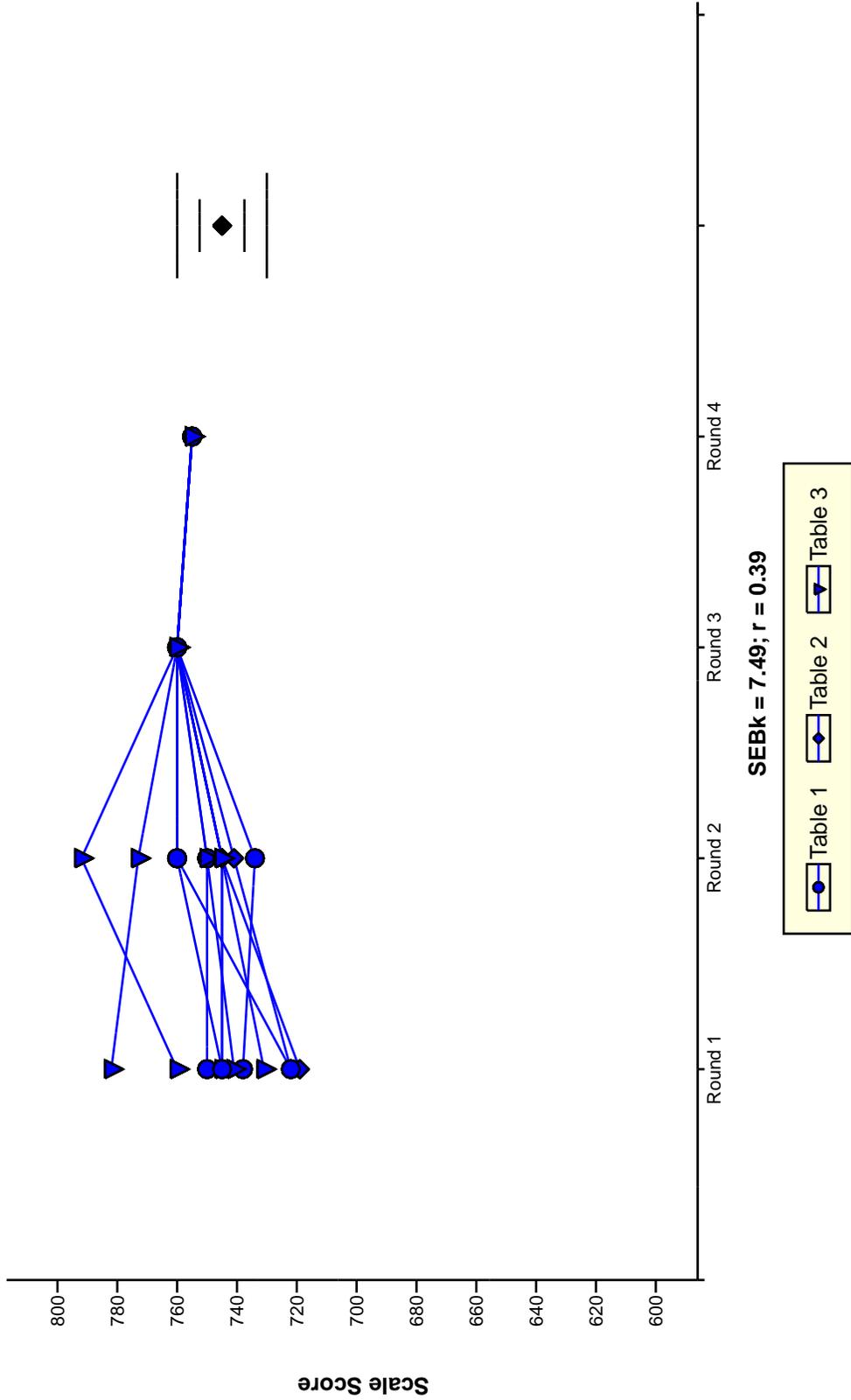


Table 3

AIMS Bookmark Standard Setting May 2005 High School Mathematics Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 High School Mathematics Exceeds Cut Point

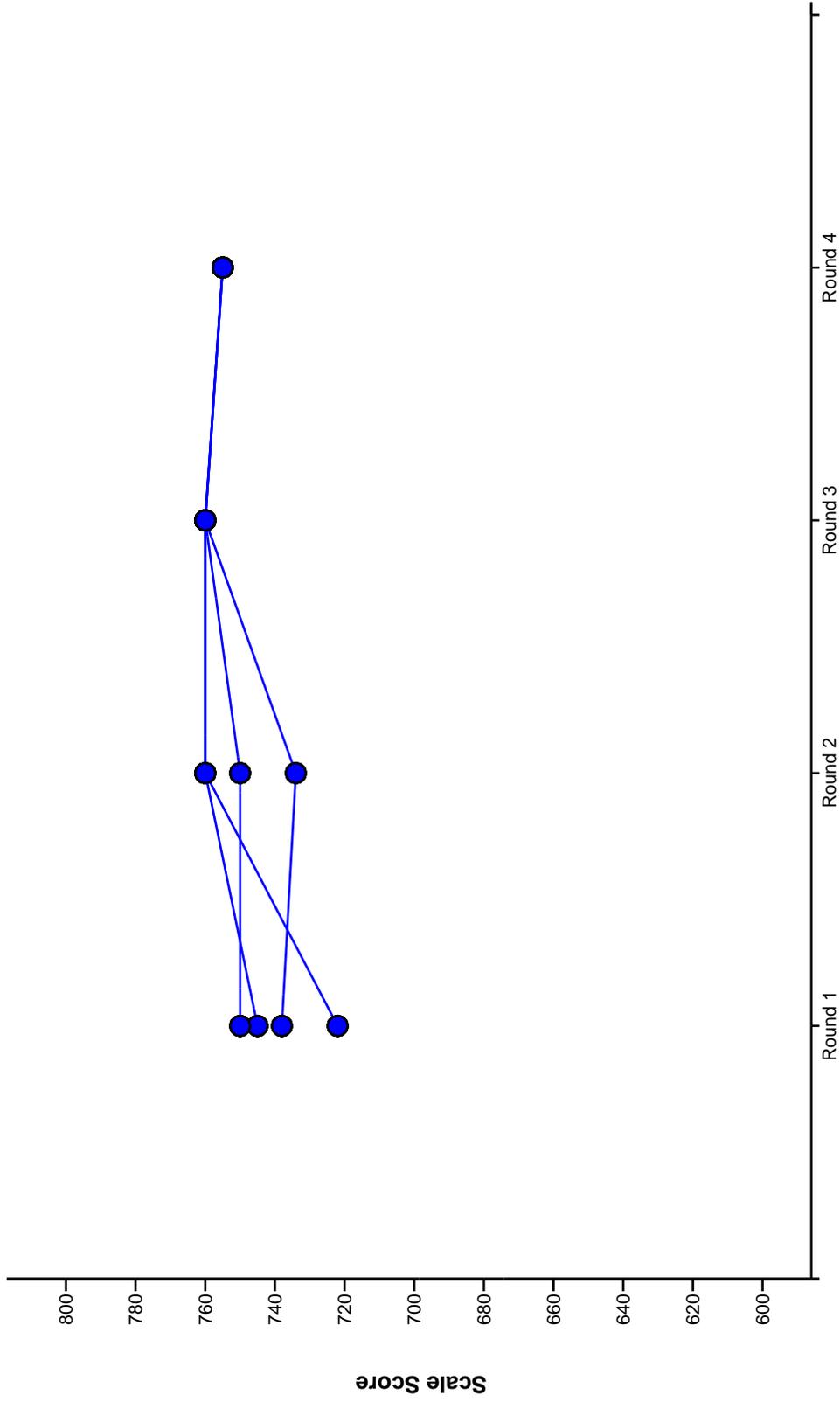


Table 1

AIMS Bookmark Standard Setting May 2005 High School Mathematics Exceeds Cut Point

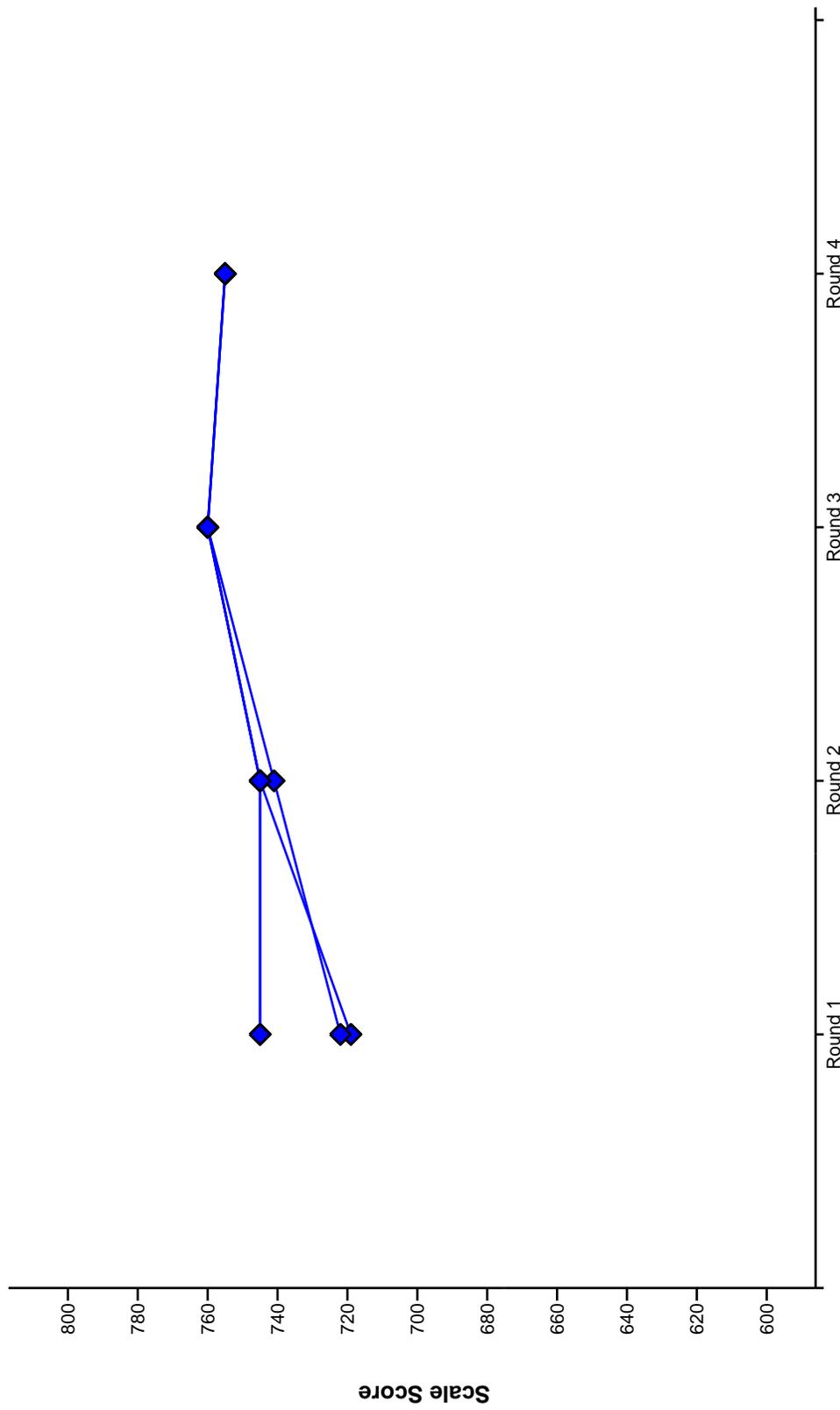


Table 2

AIMS Bookmark Standard Setting May 2005 High School Mathematics Exceeds Cut Point

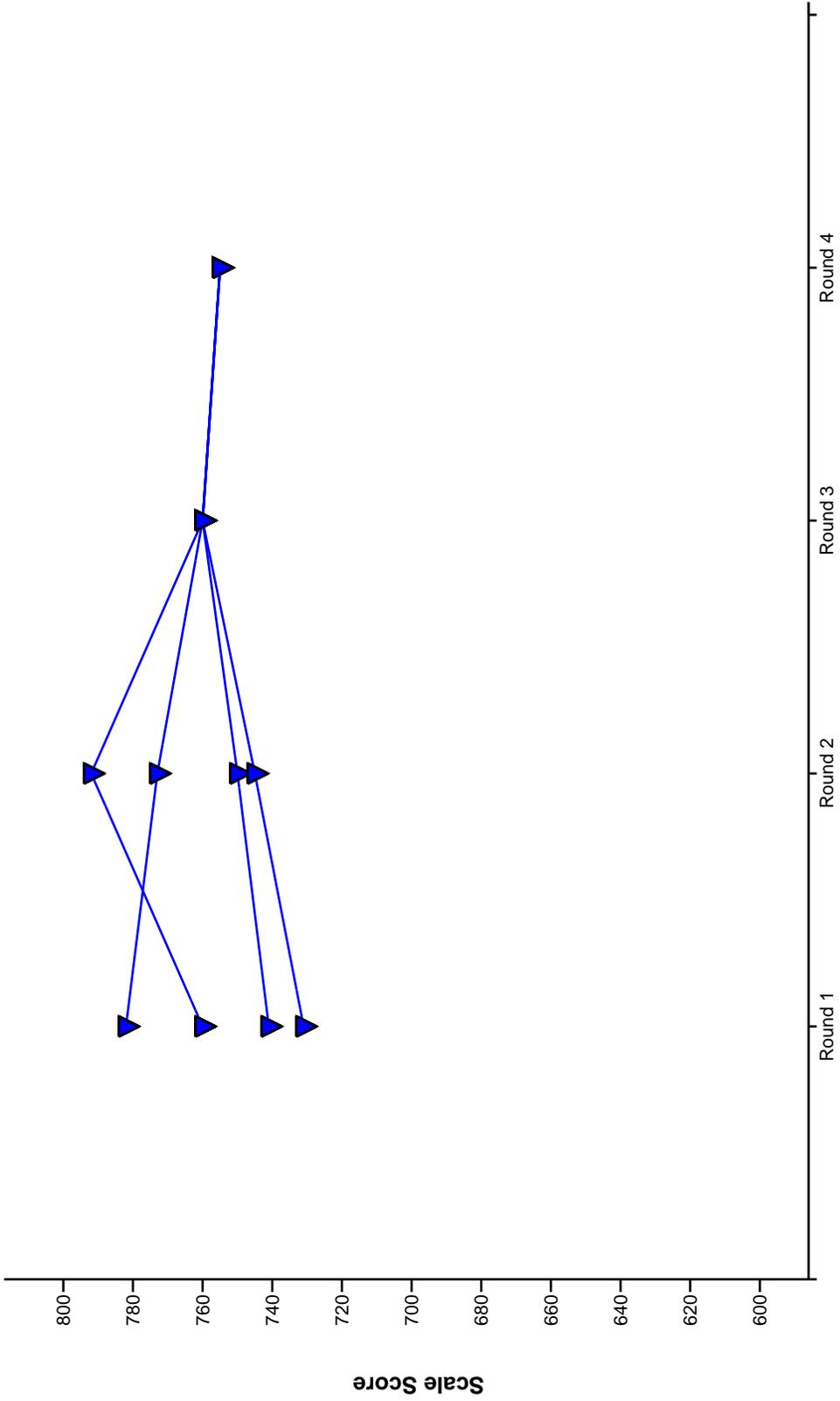
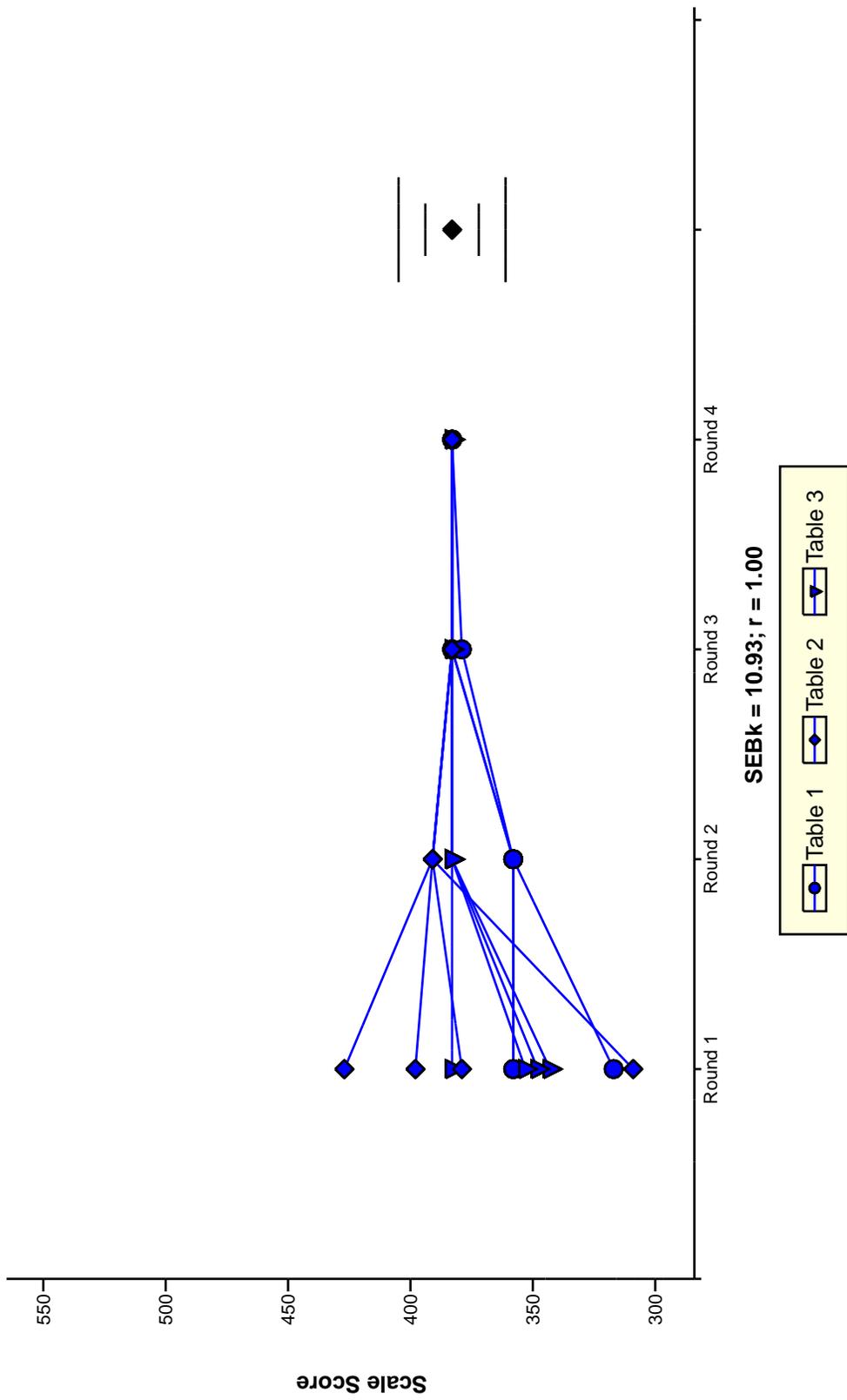


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Approaches Cut Point

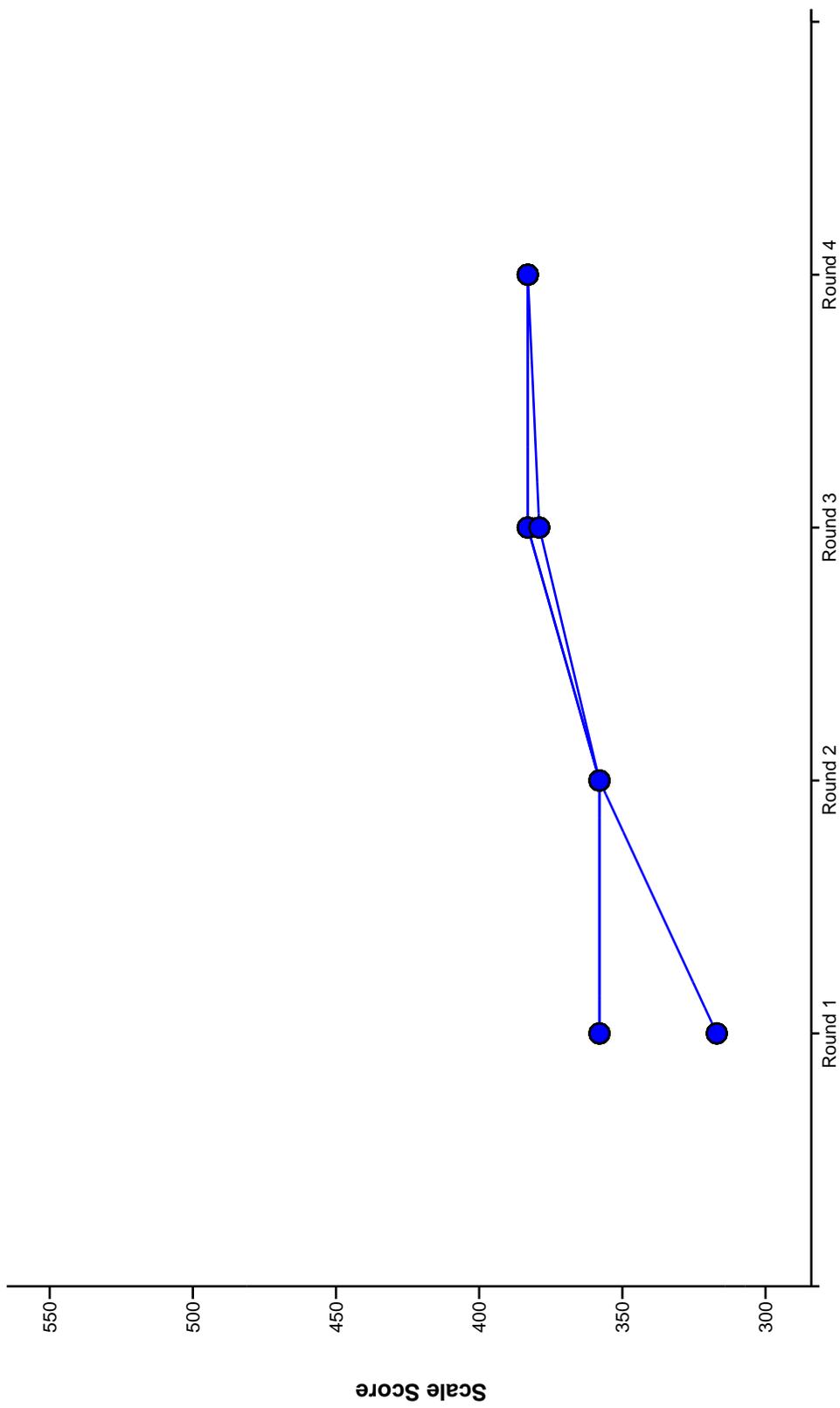


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Approaches Cut Point

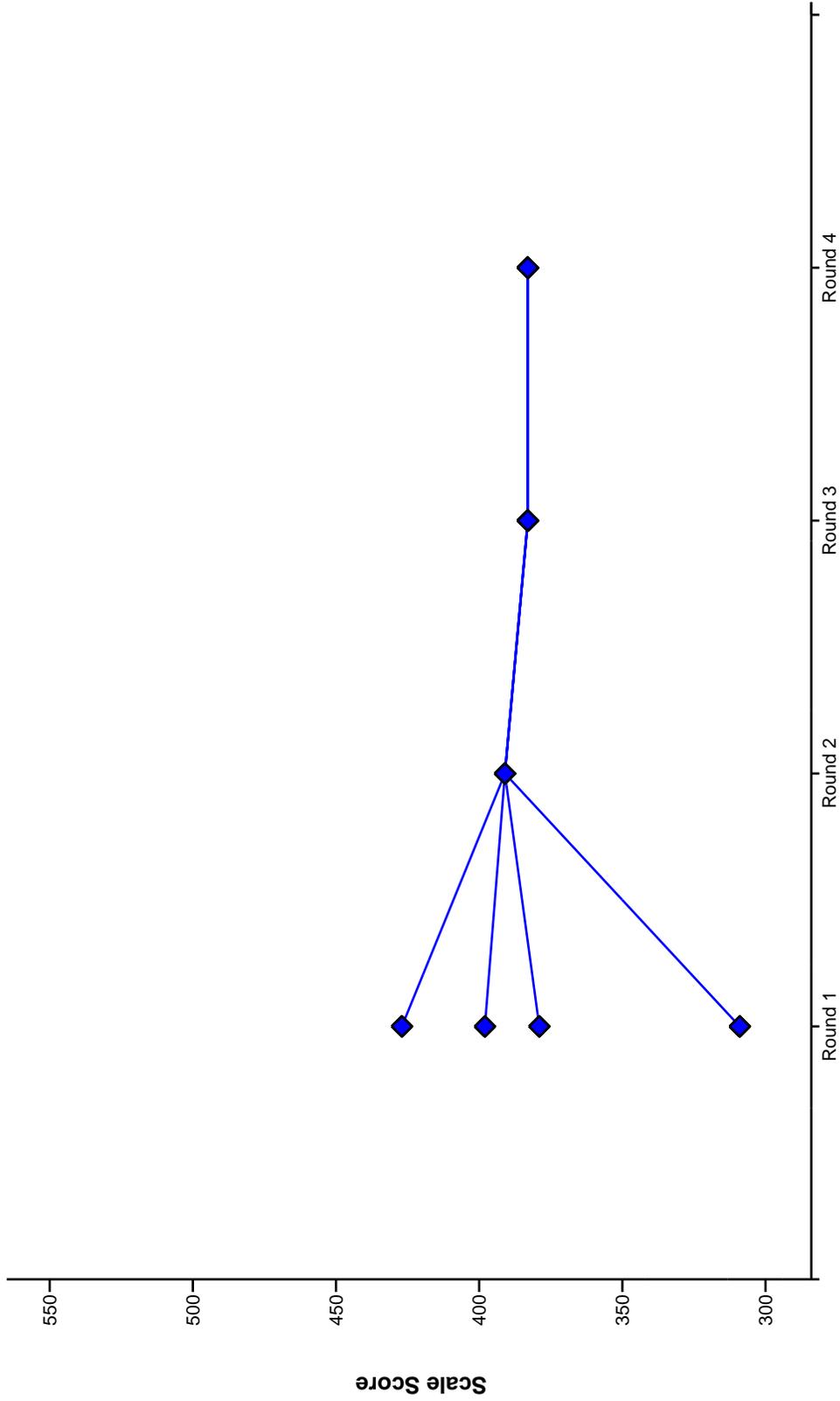


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Approaches Cut Point

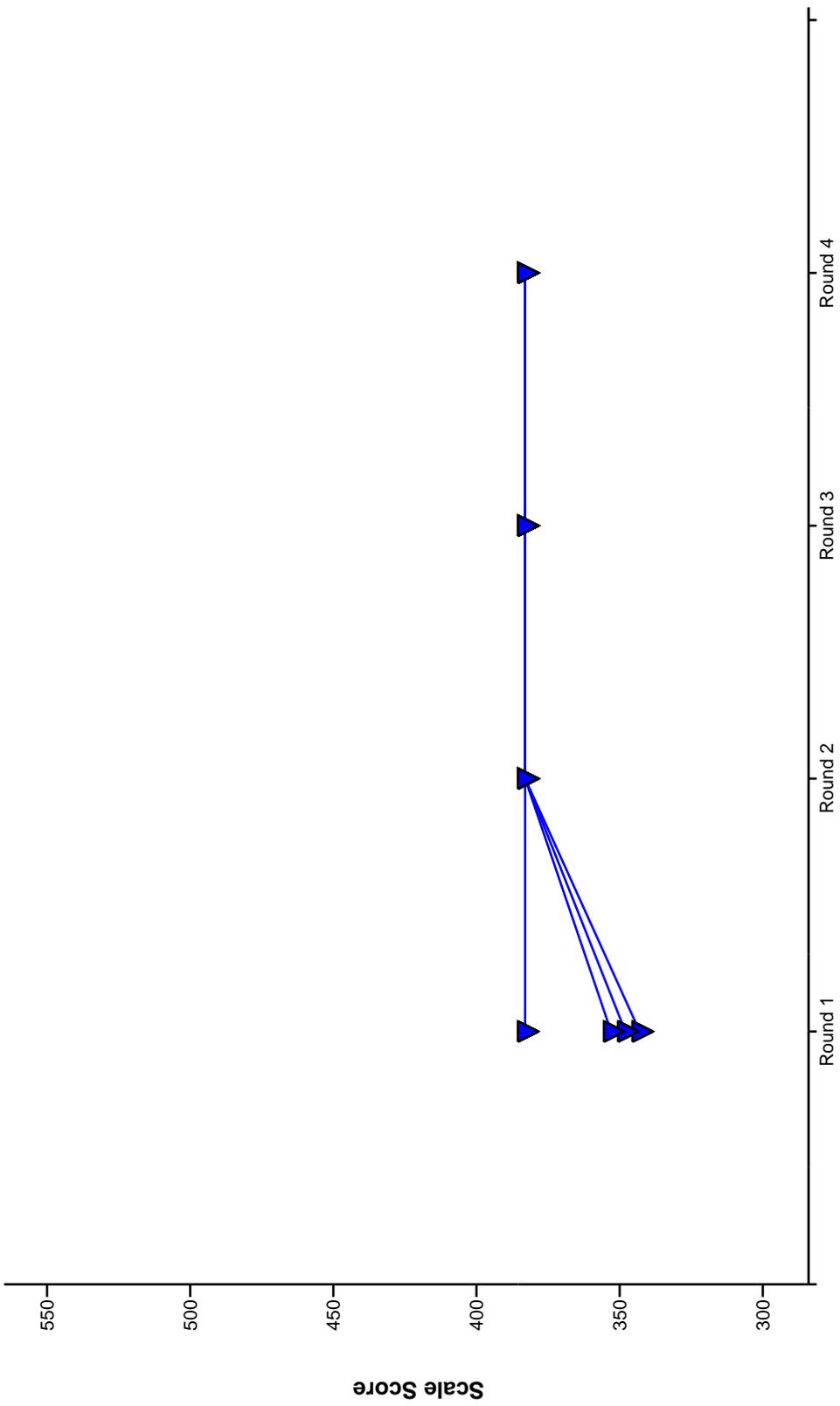
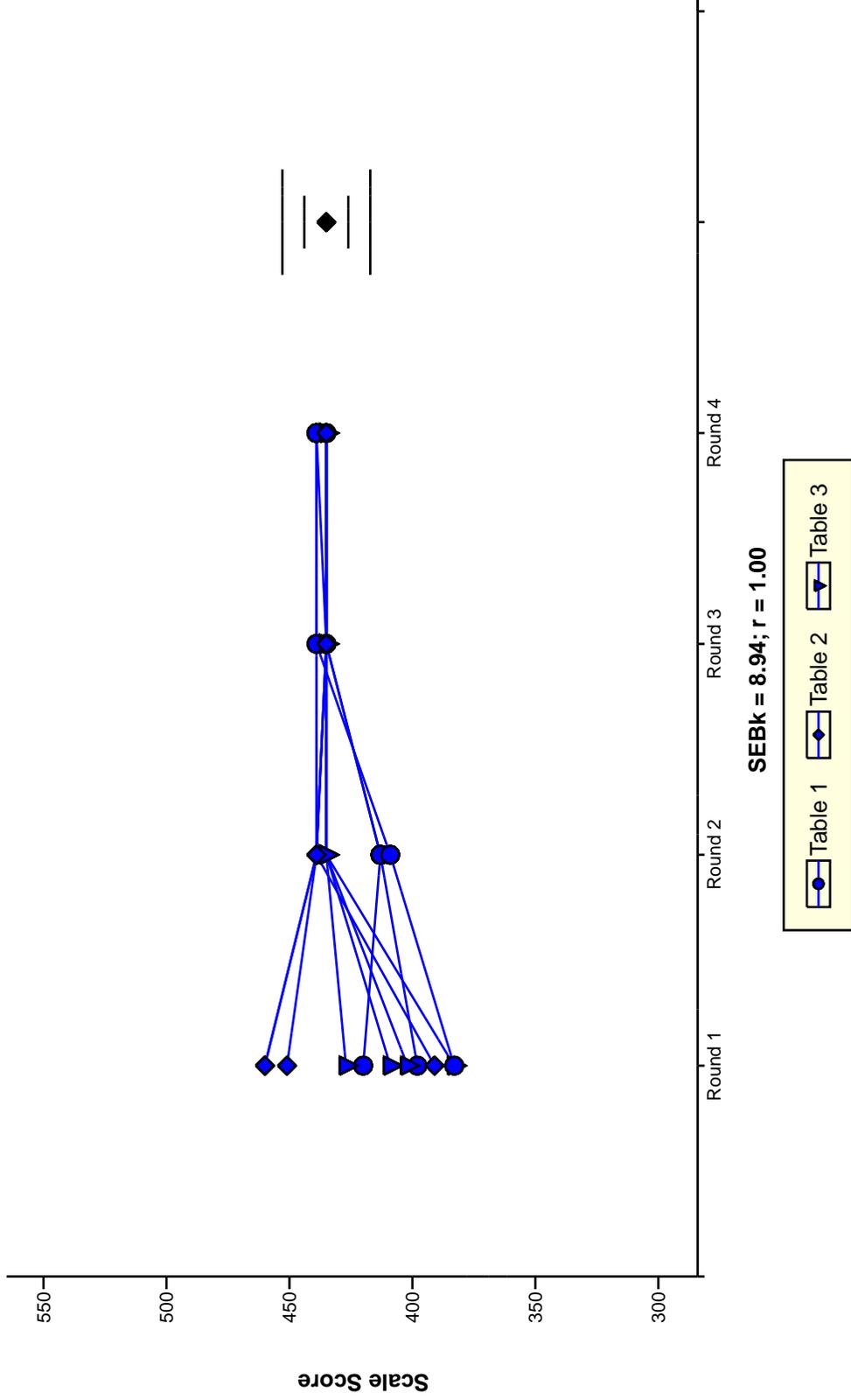


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Meets Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Meets Cut Point

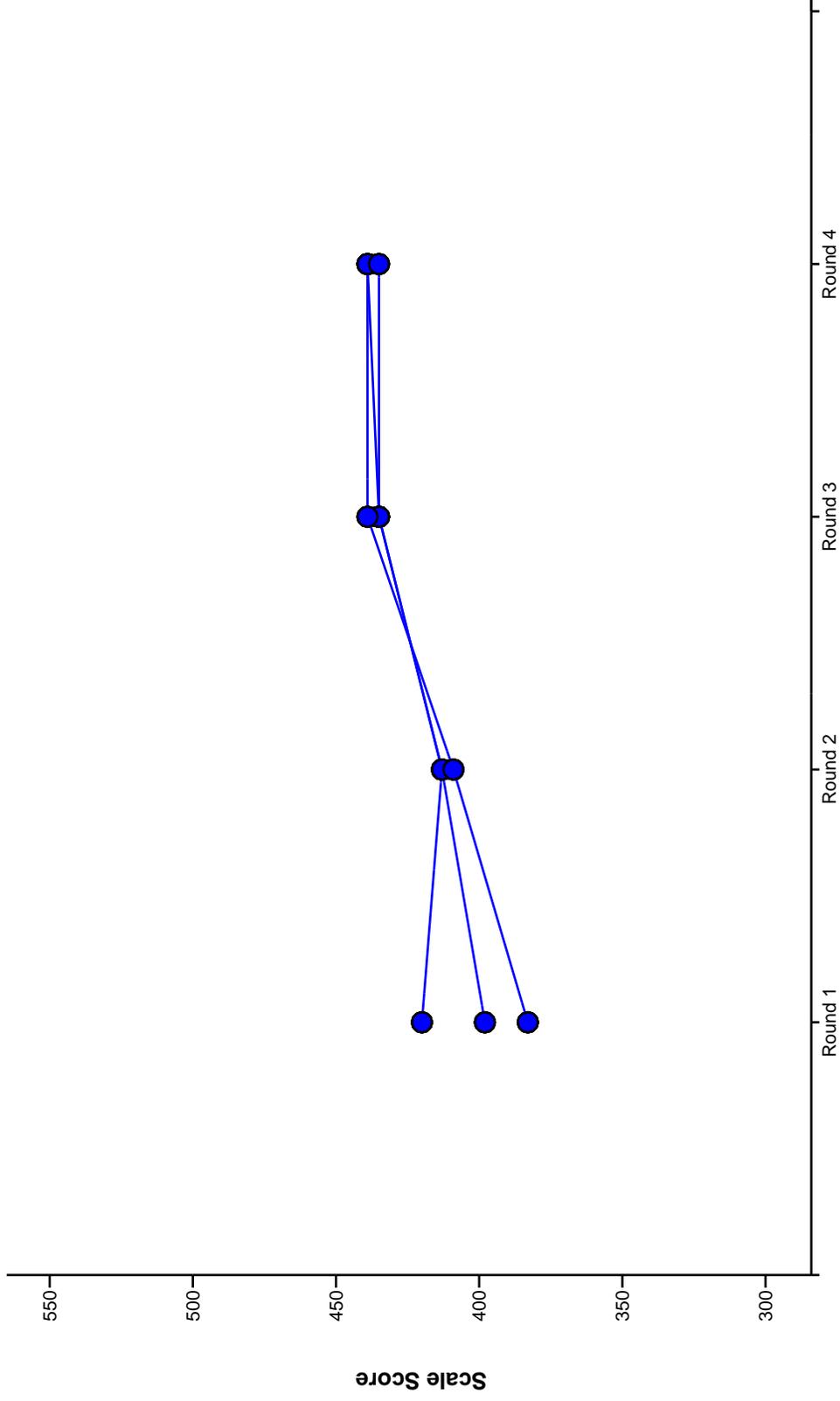


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Meets Cut Point

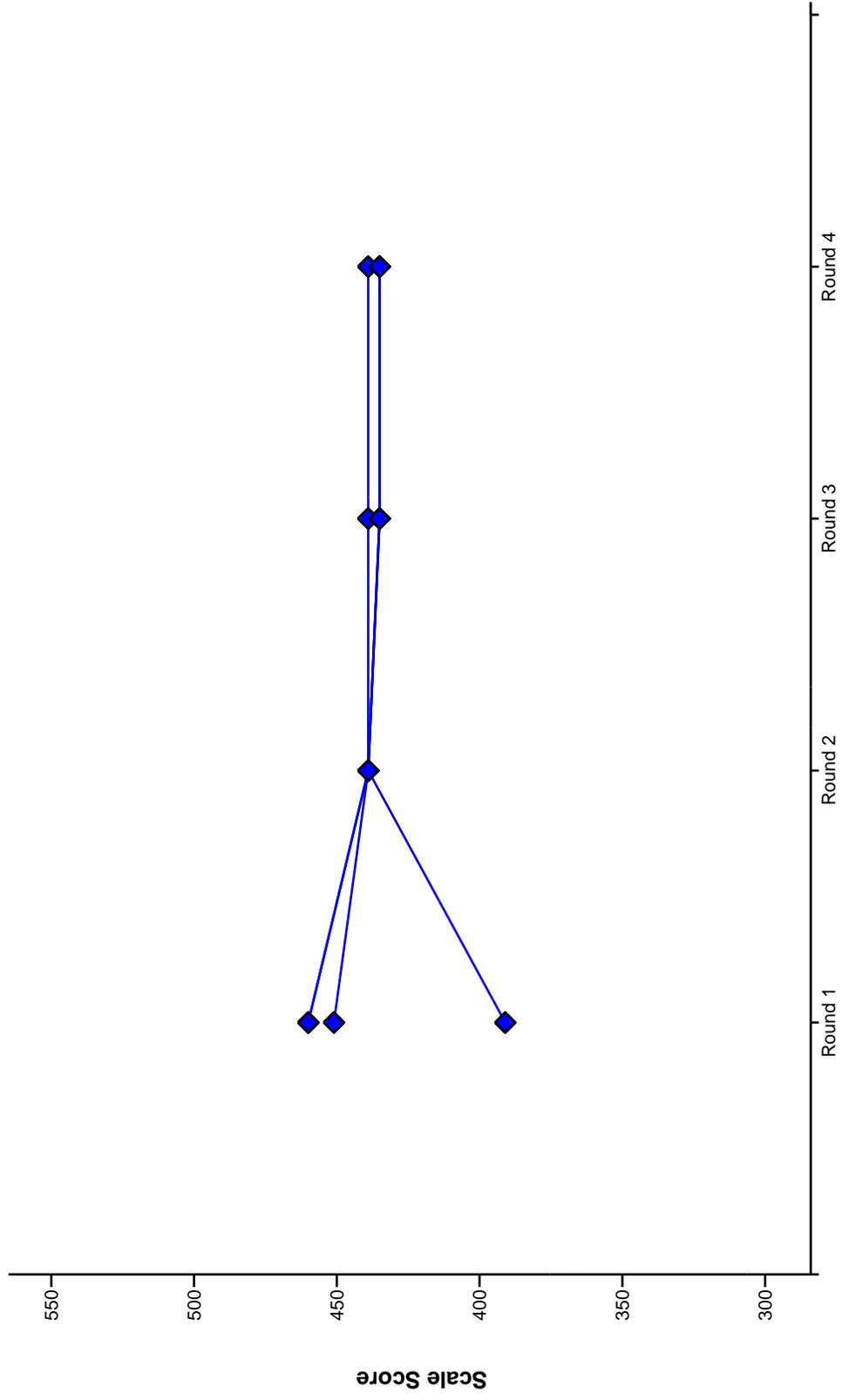


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Meets Cut Point

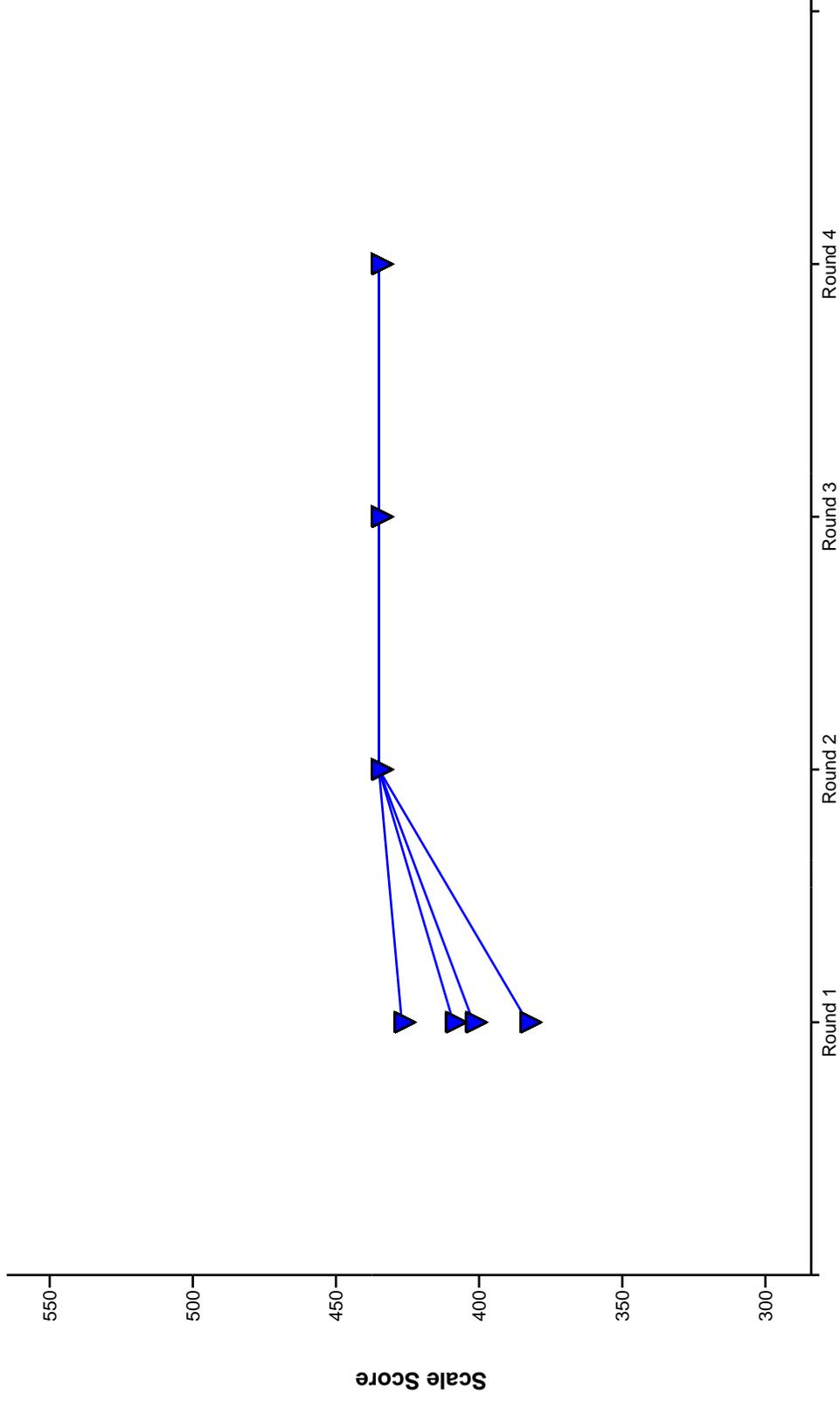
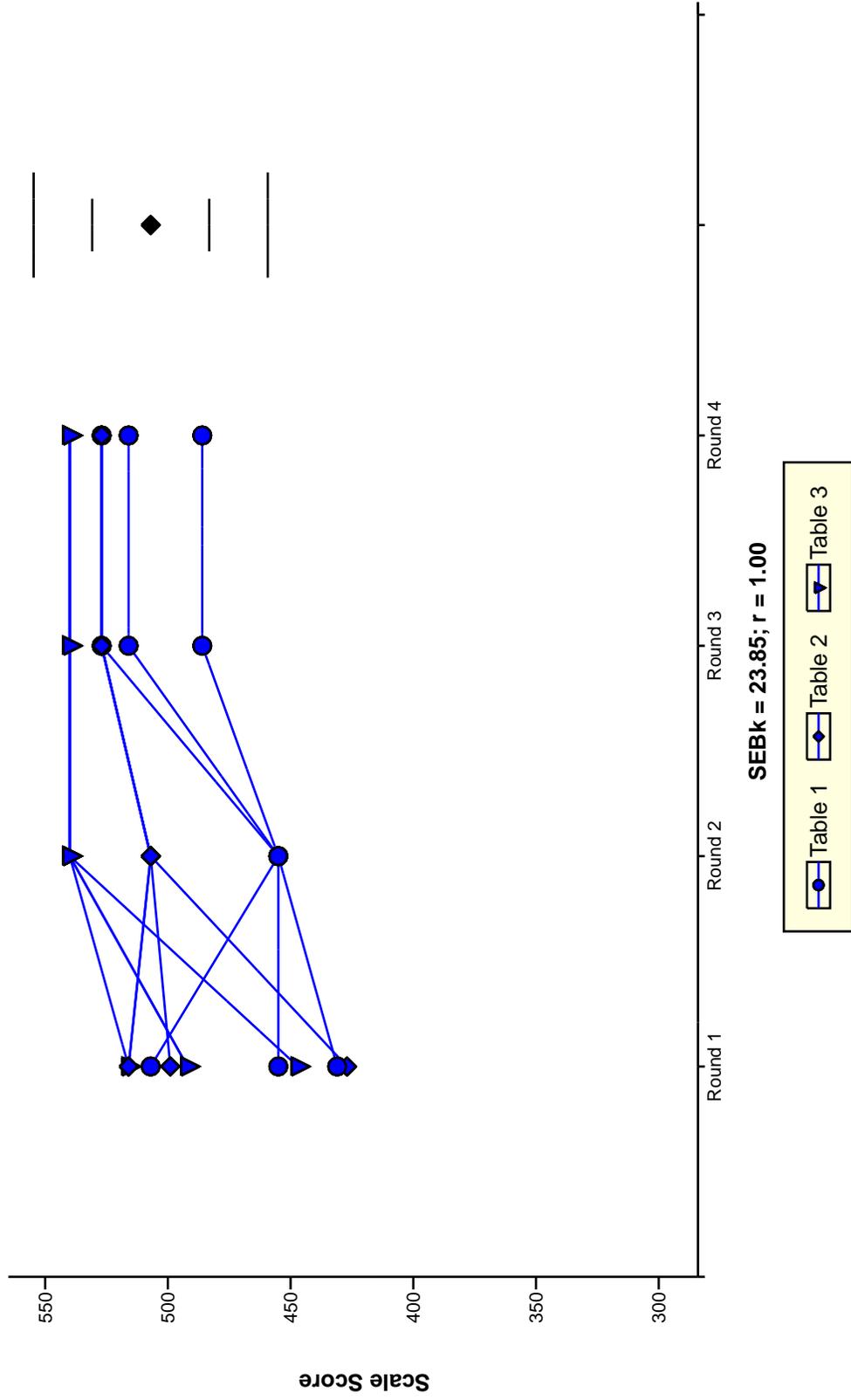


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Exceeds Cut Point

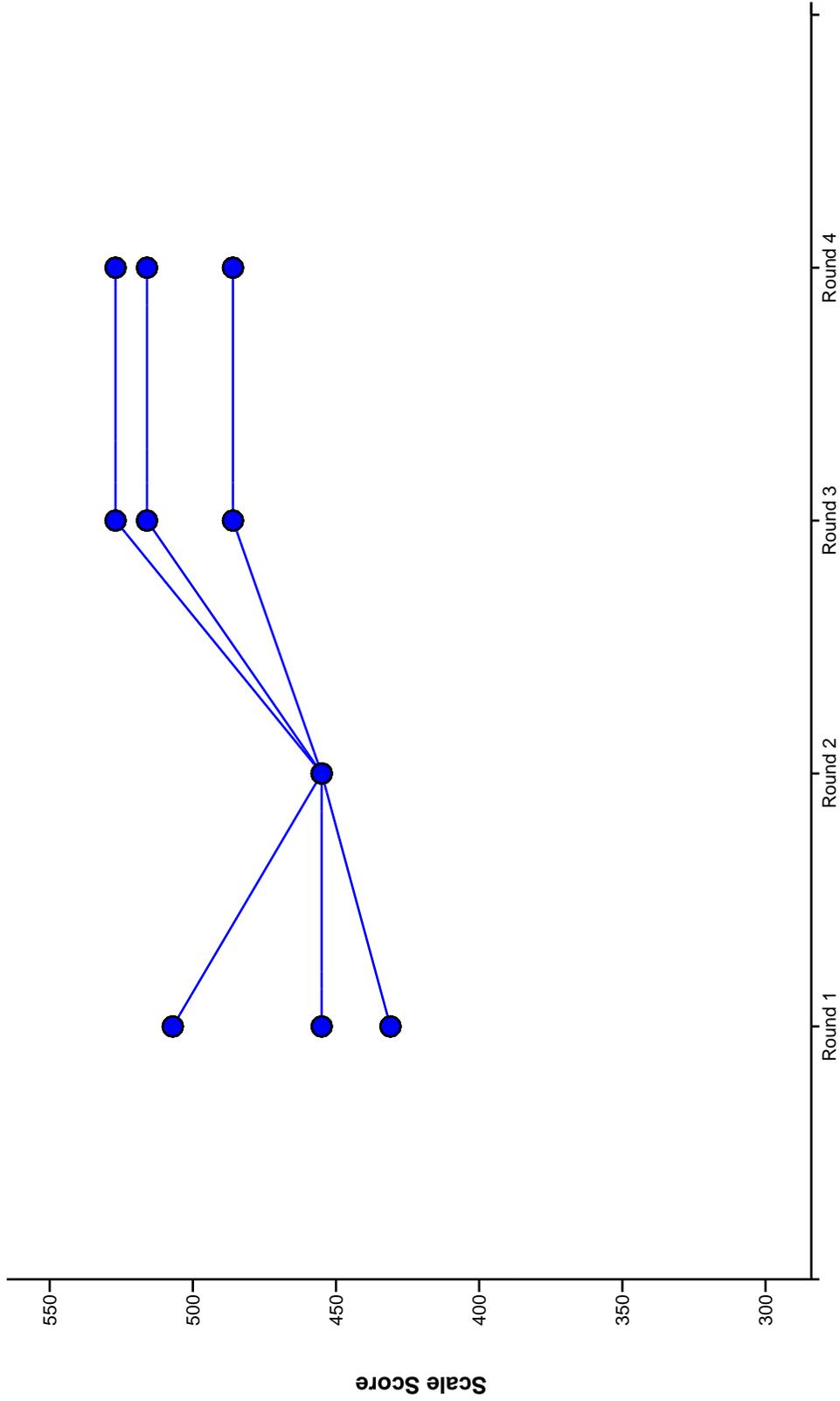


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Exceeds Cut Point

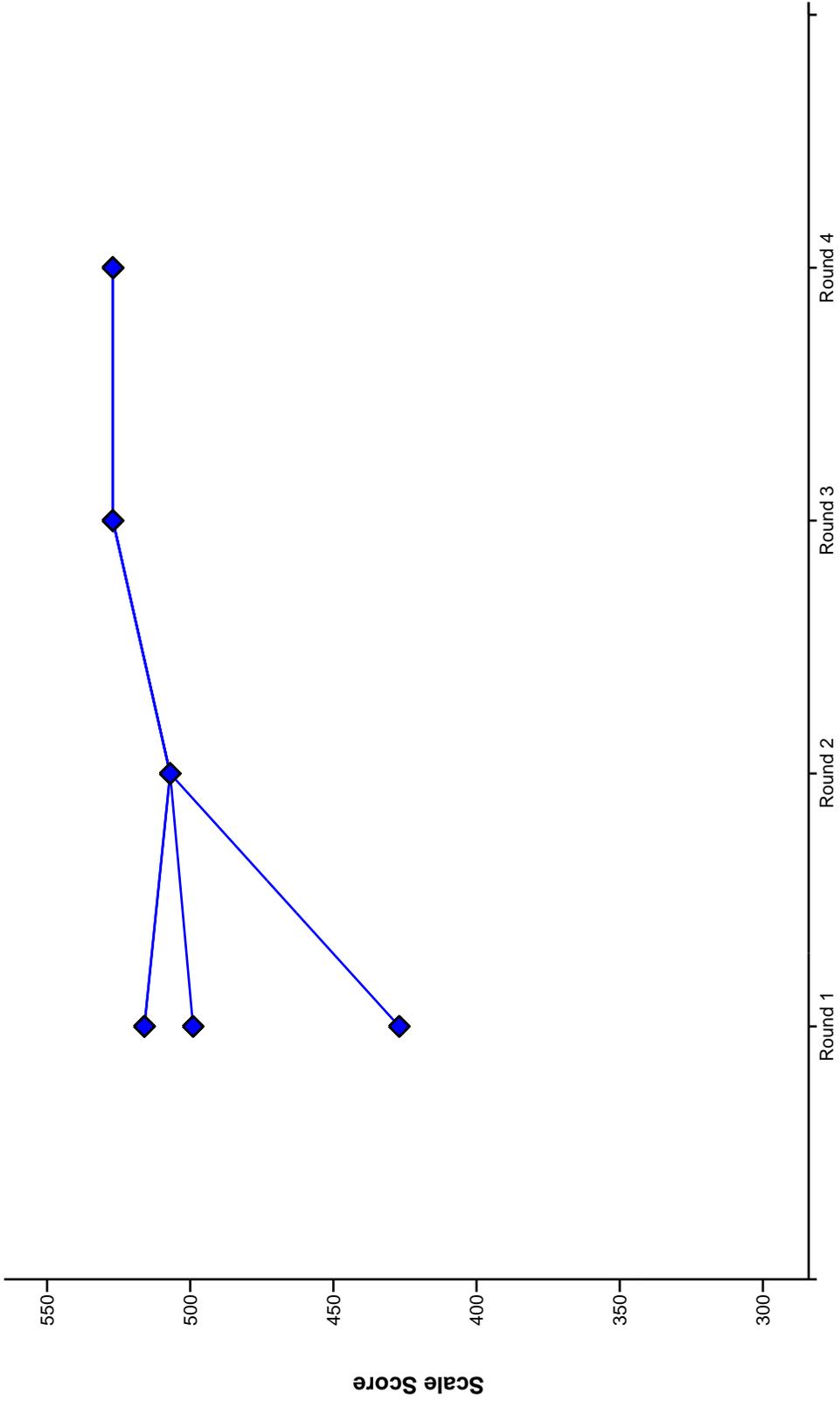


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 3 Reading Exceeds Cut Point

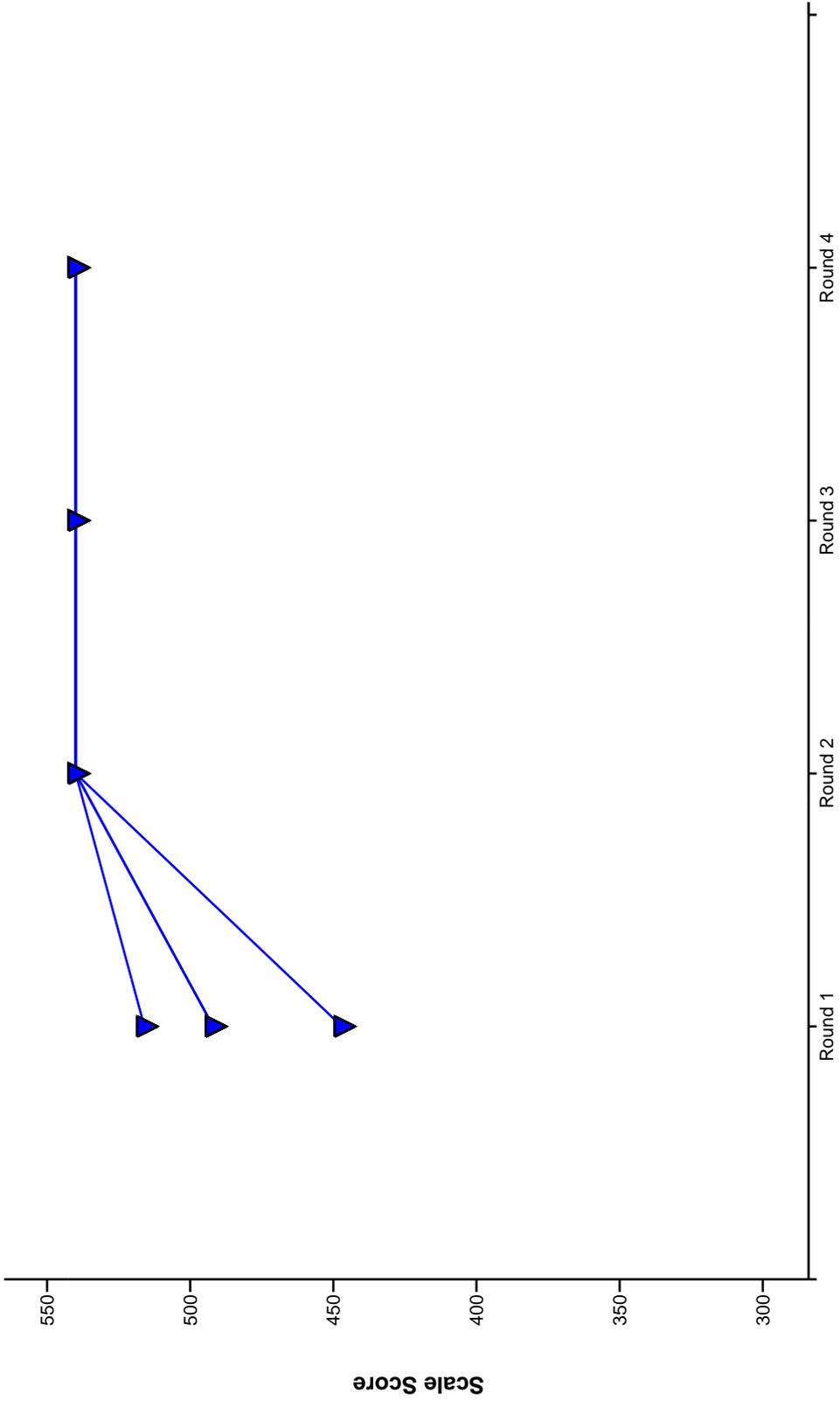
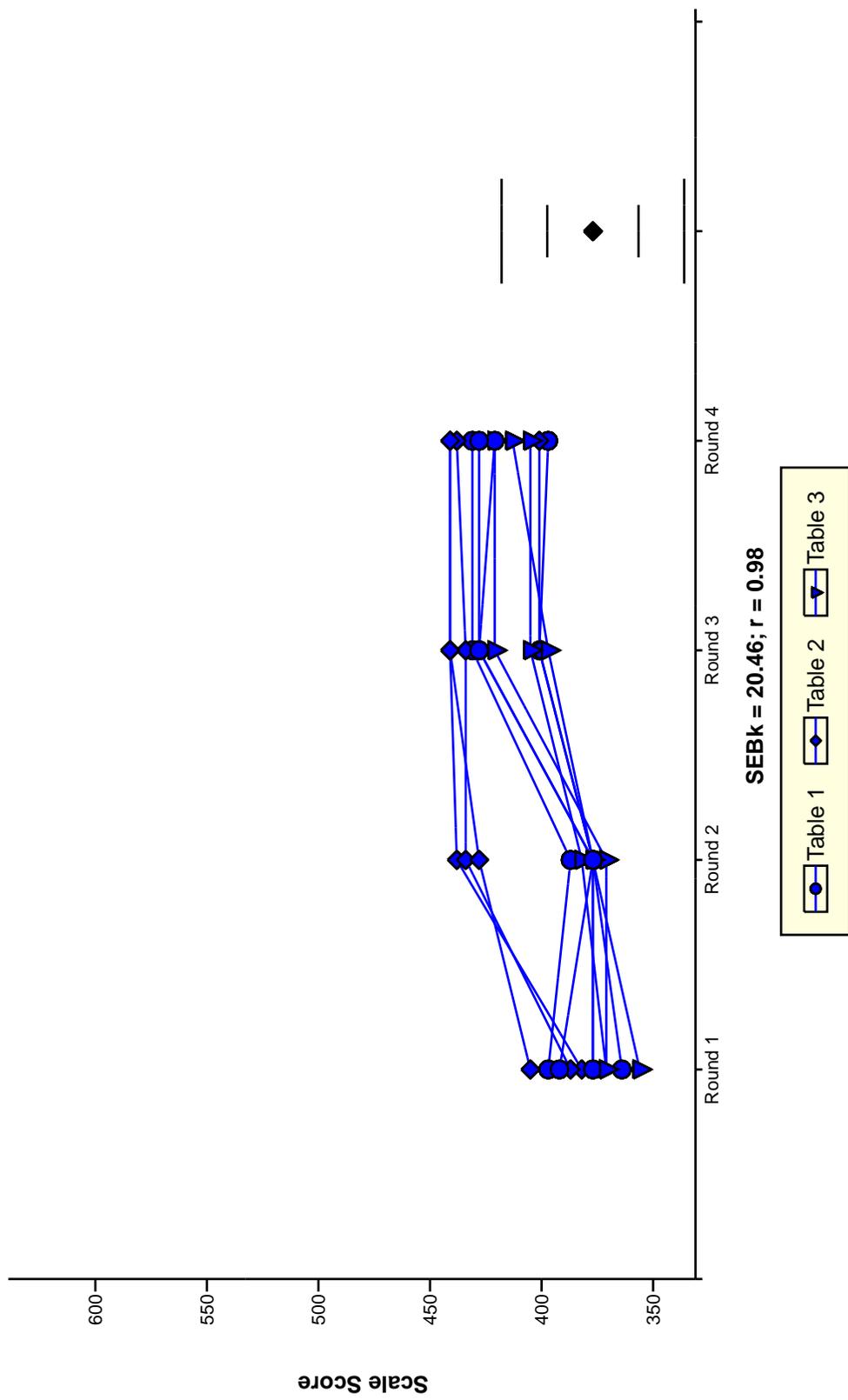


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Approaches Cut Point

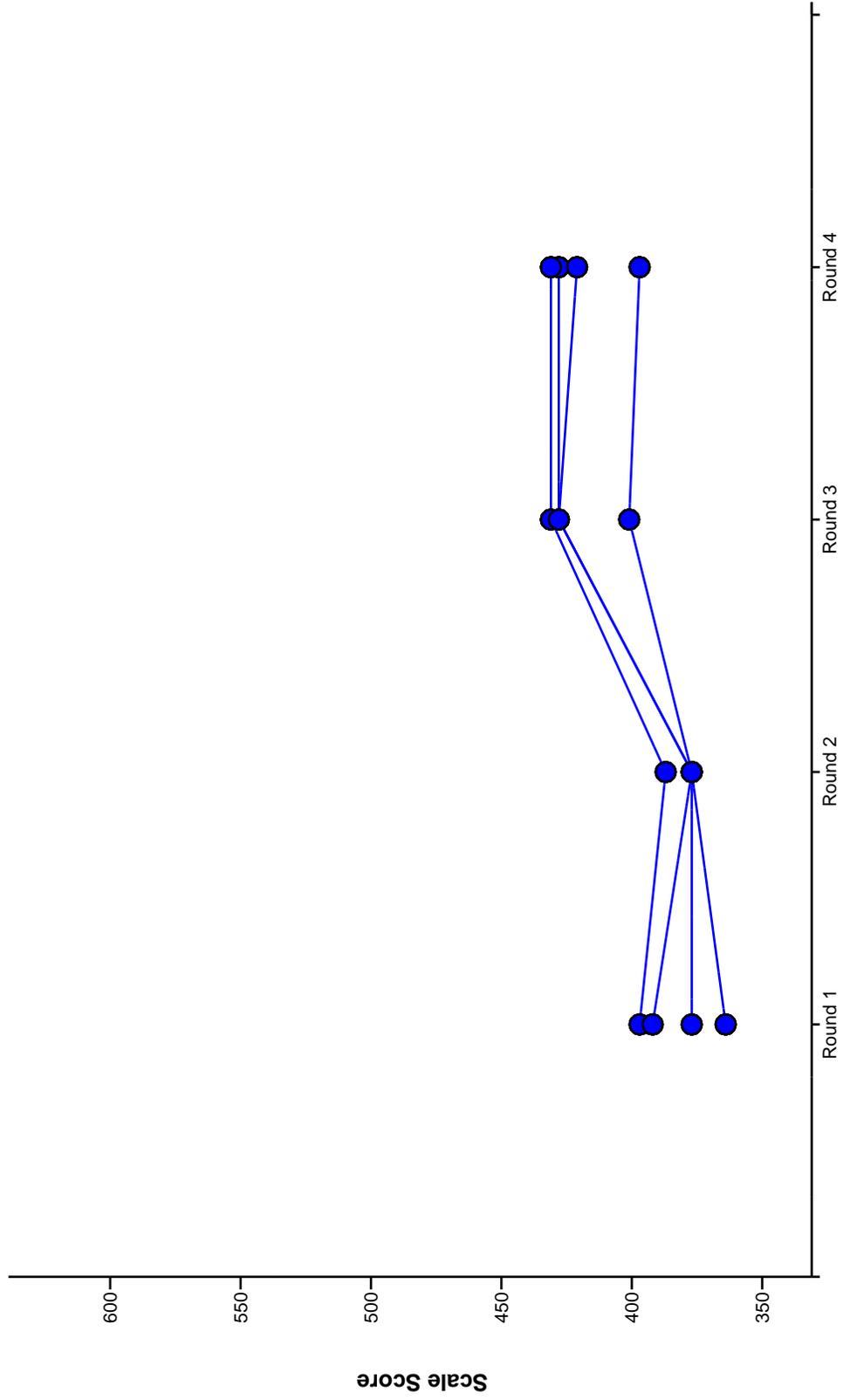


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Approaches Cut Point

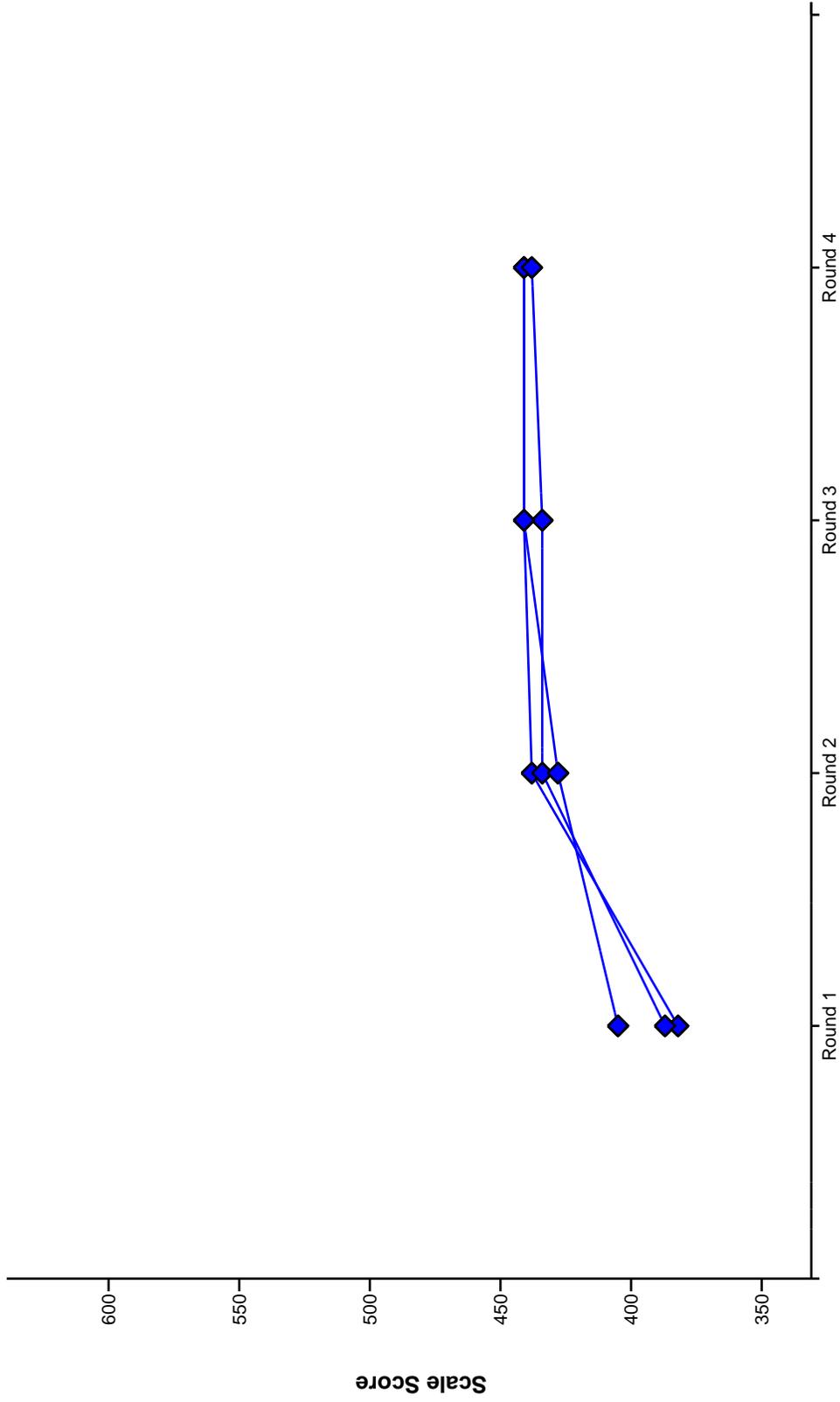


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Approaches Cut Point

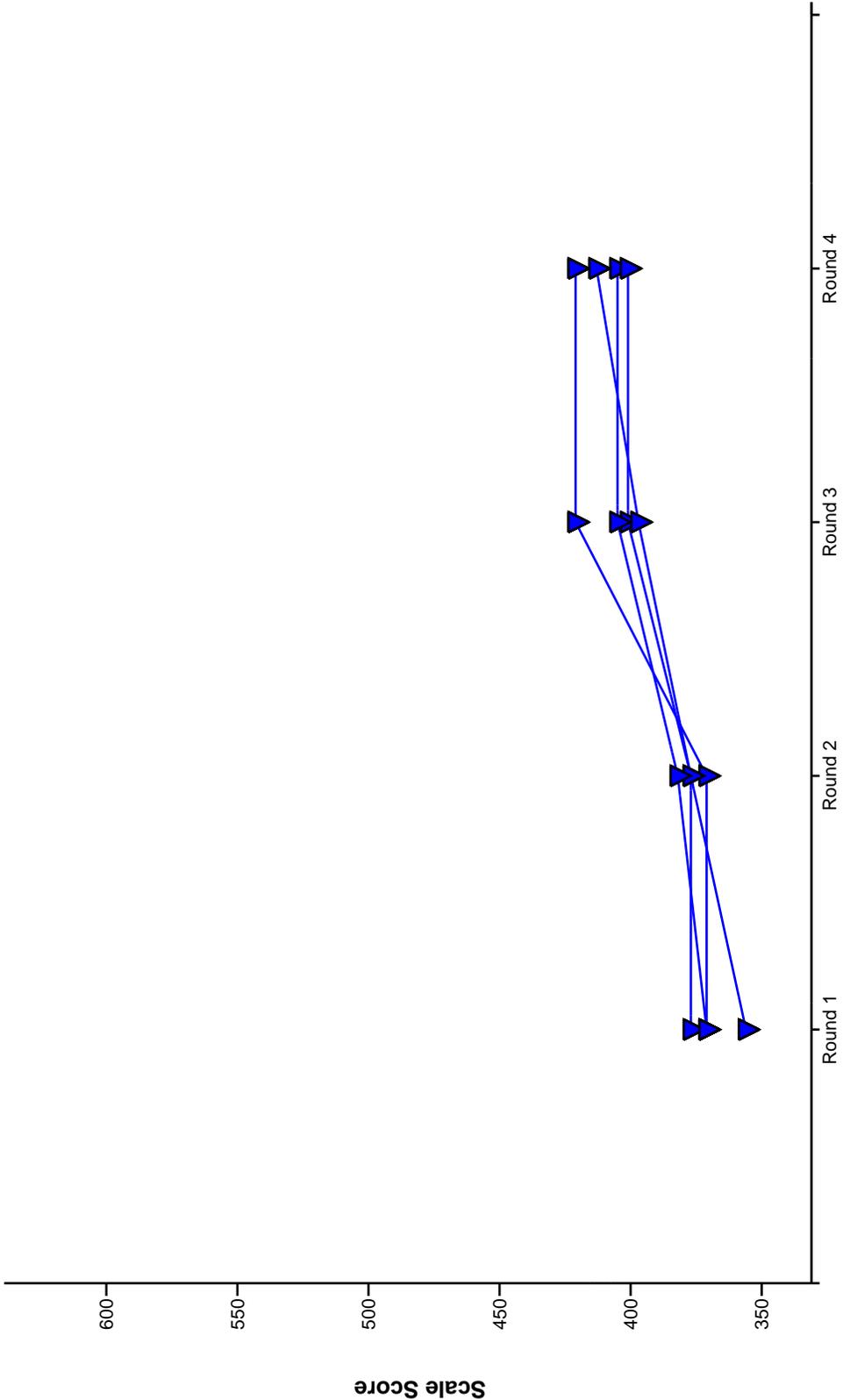
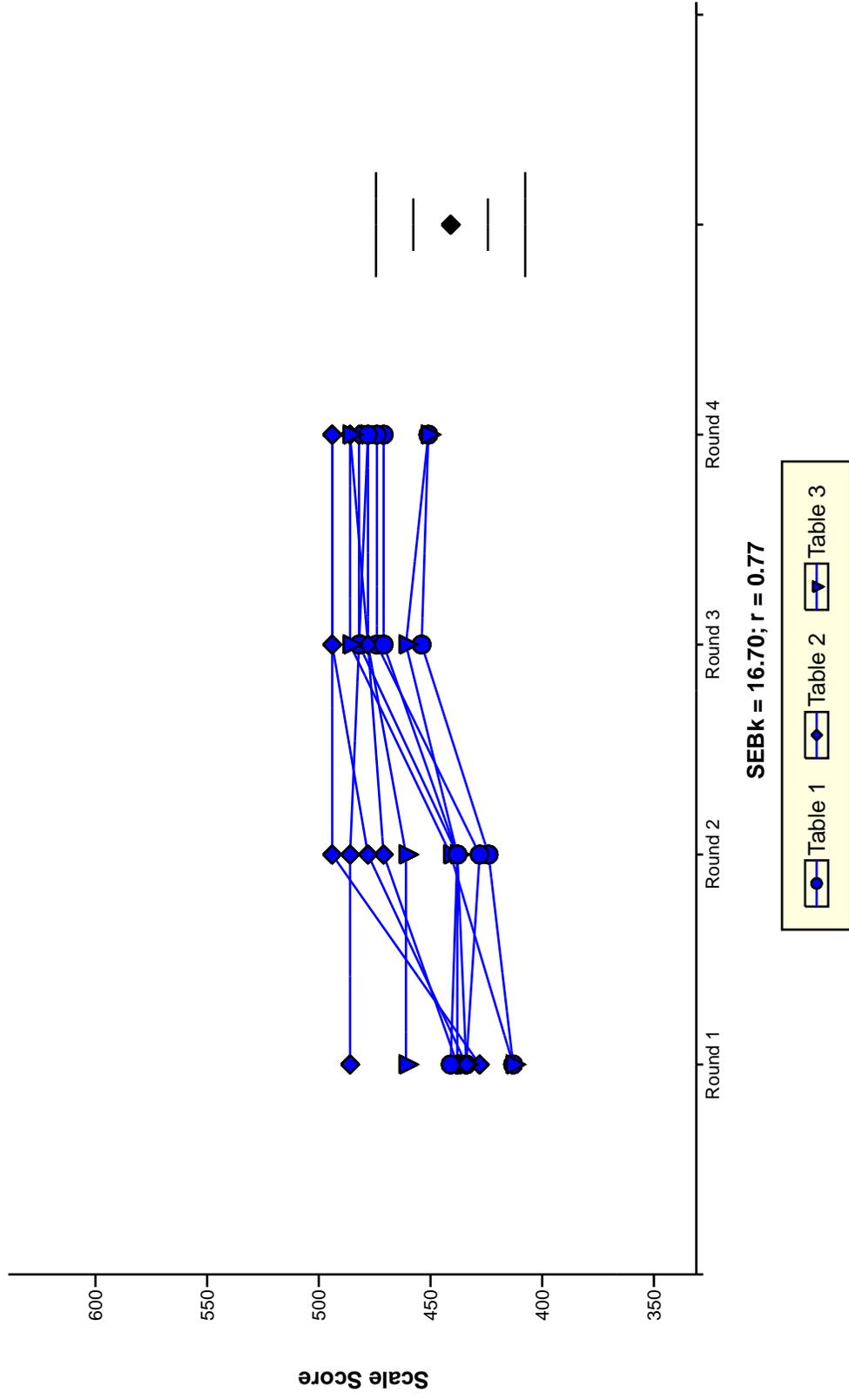


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Meets Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Meets Cut Point

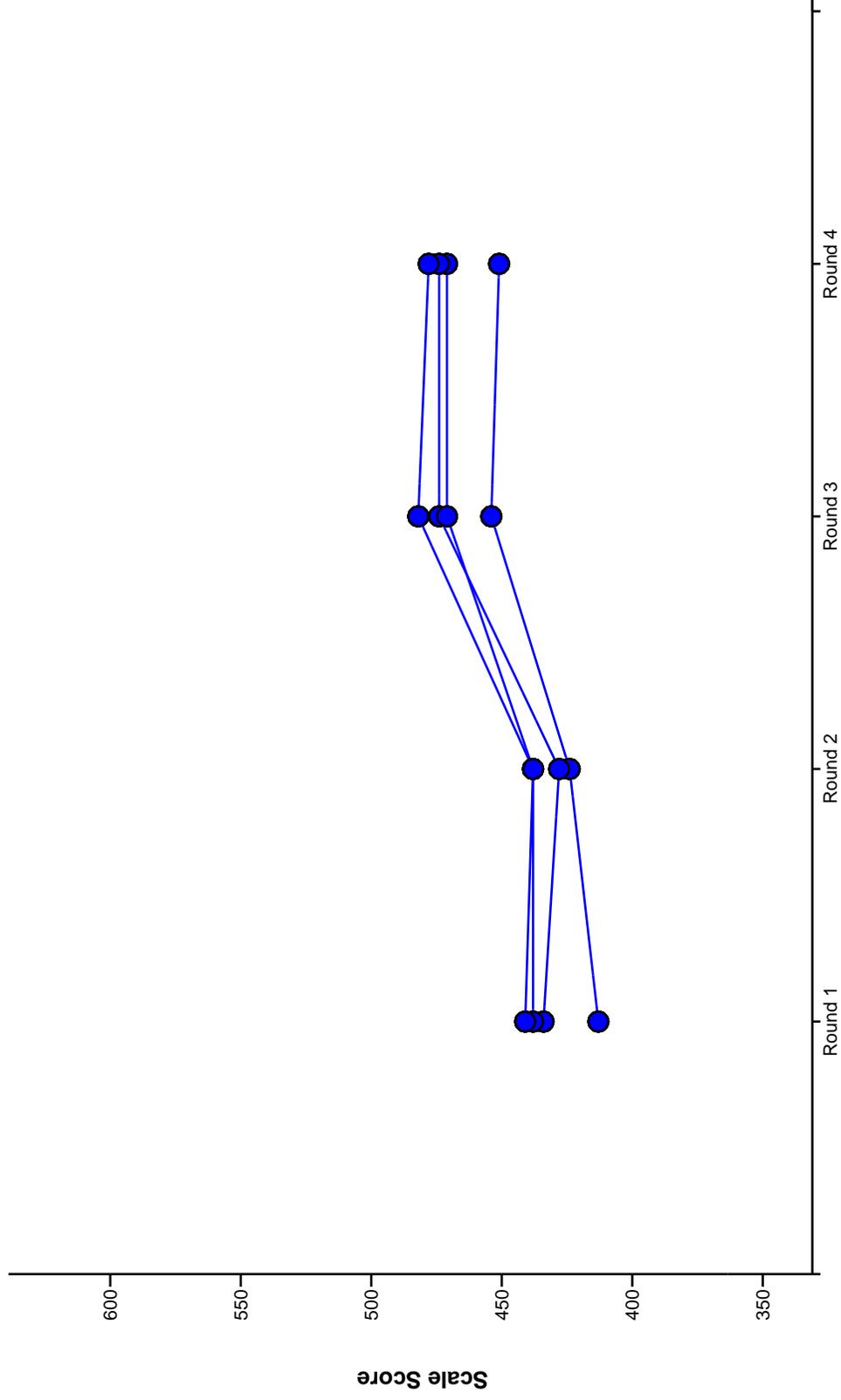


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Meets Cut Point

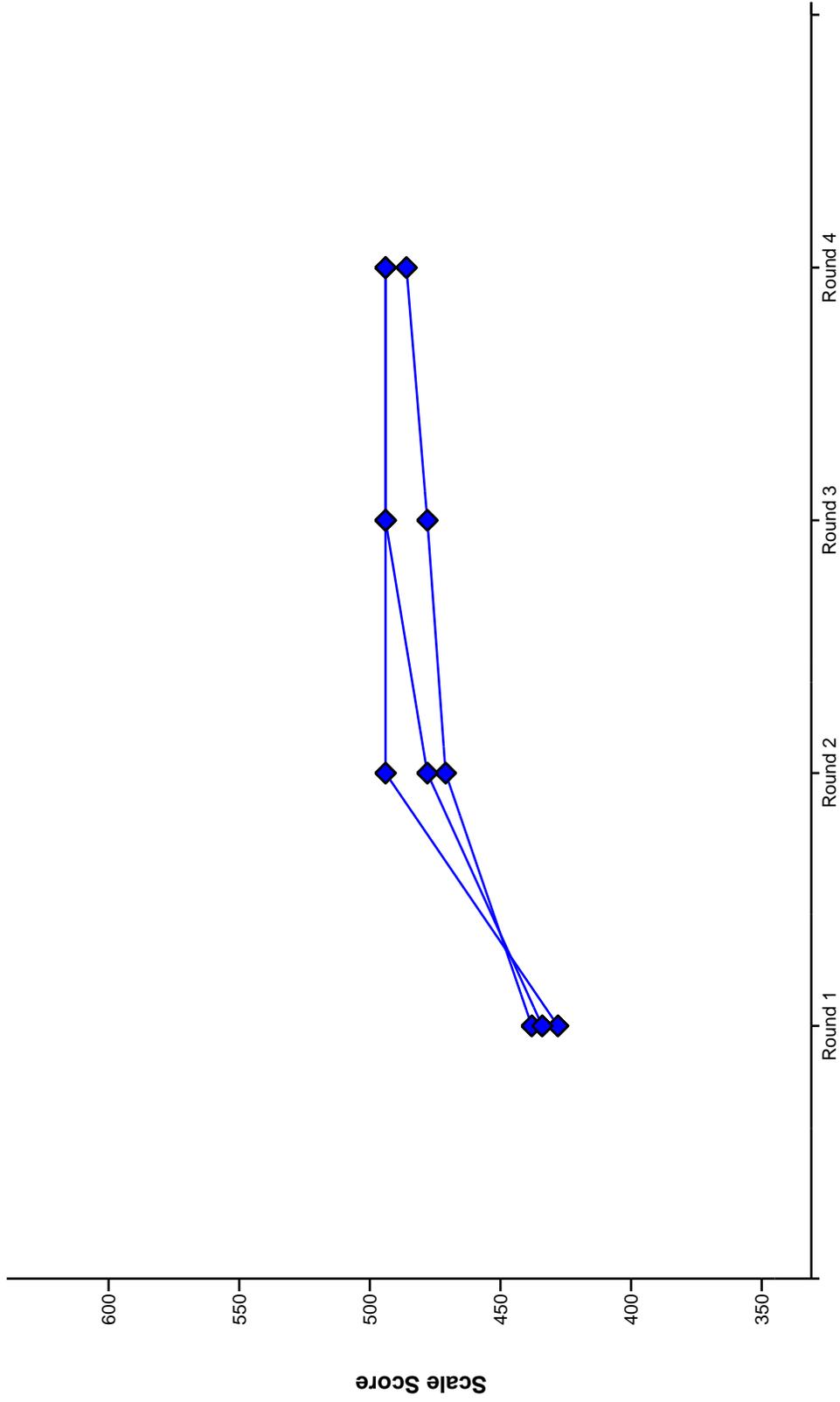


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Meets Cut Point

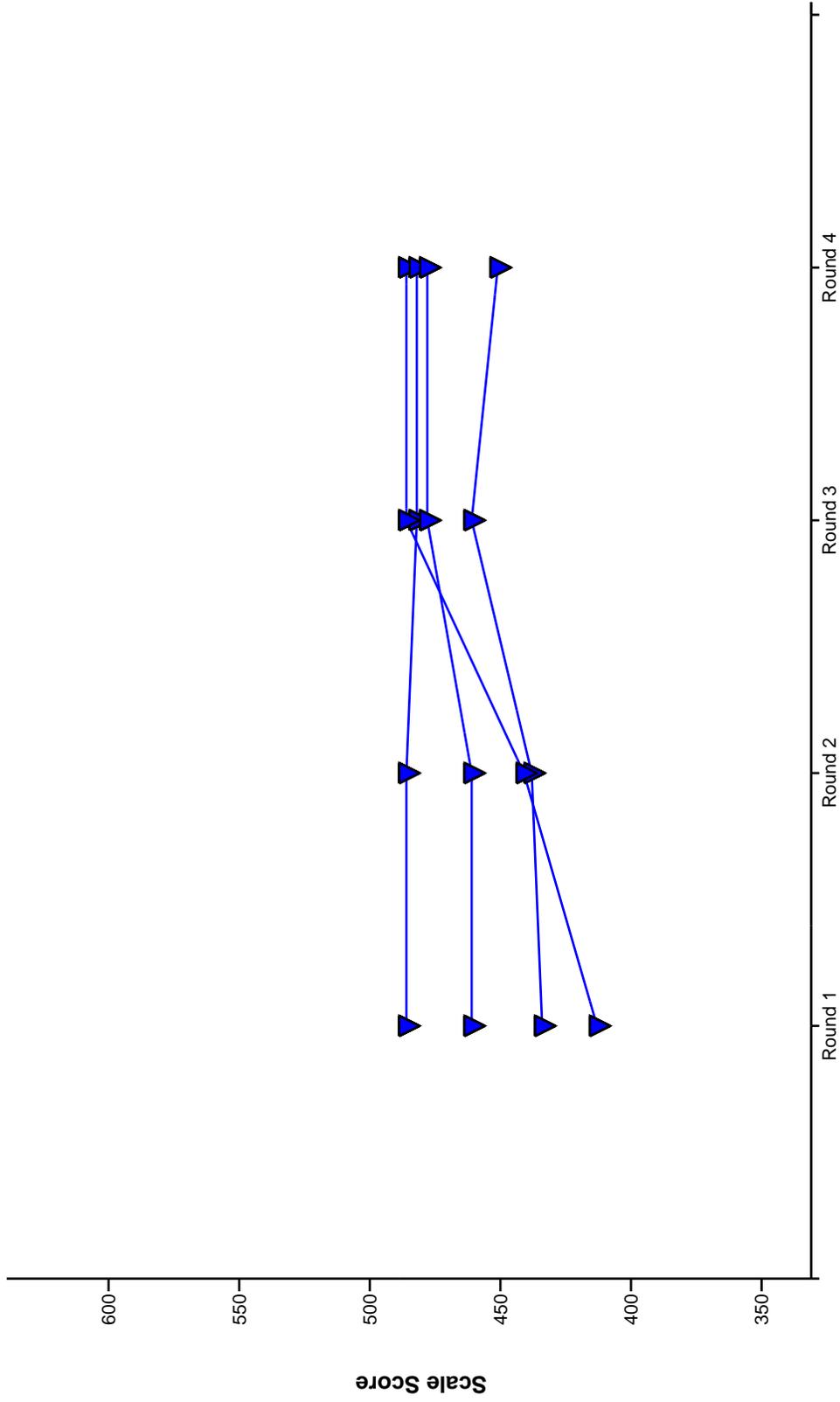
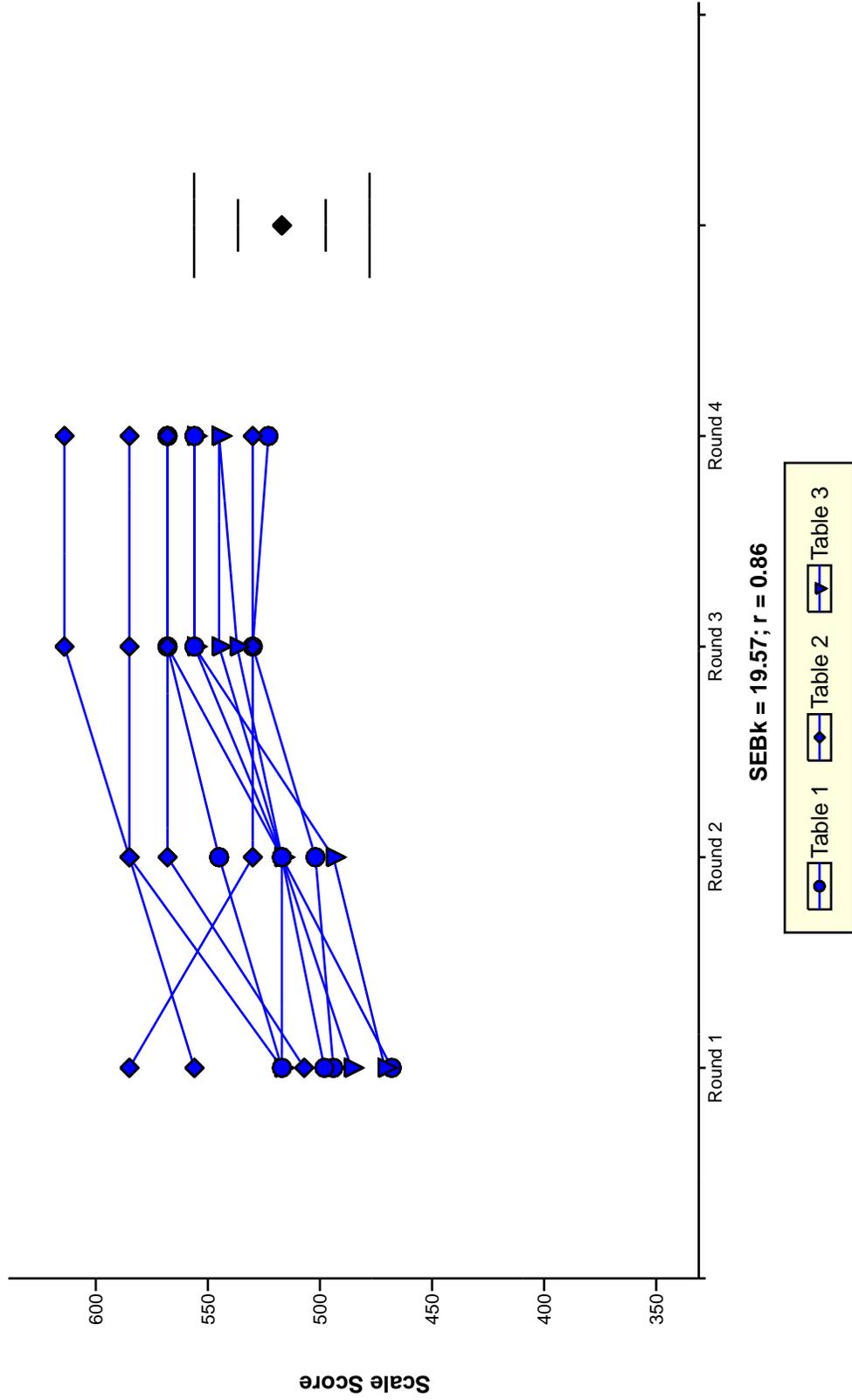


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Exceeds Cut Point

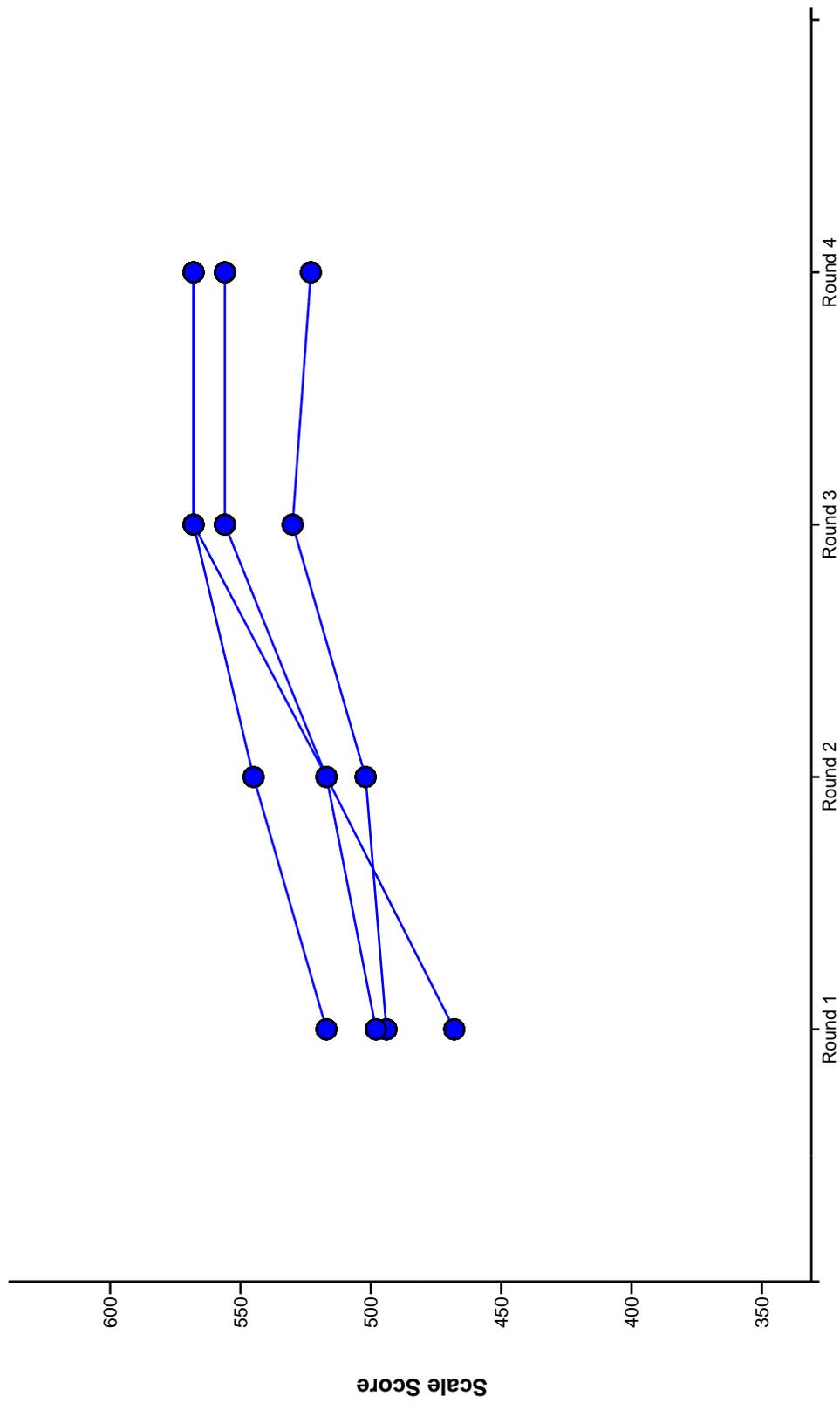


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Exceeds Cut Point

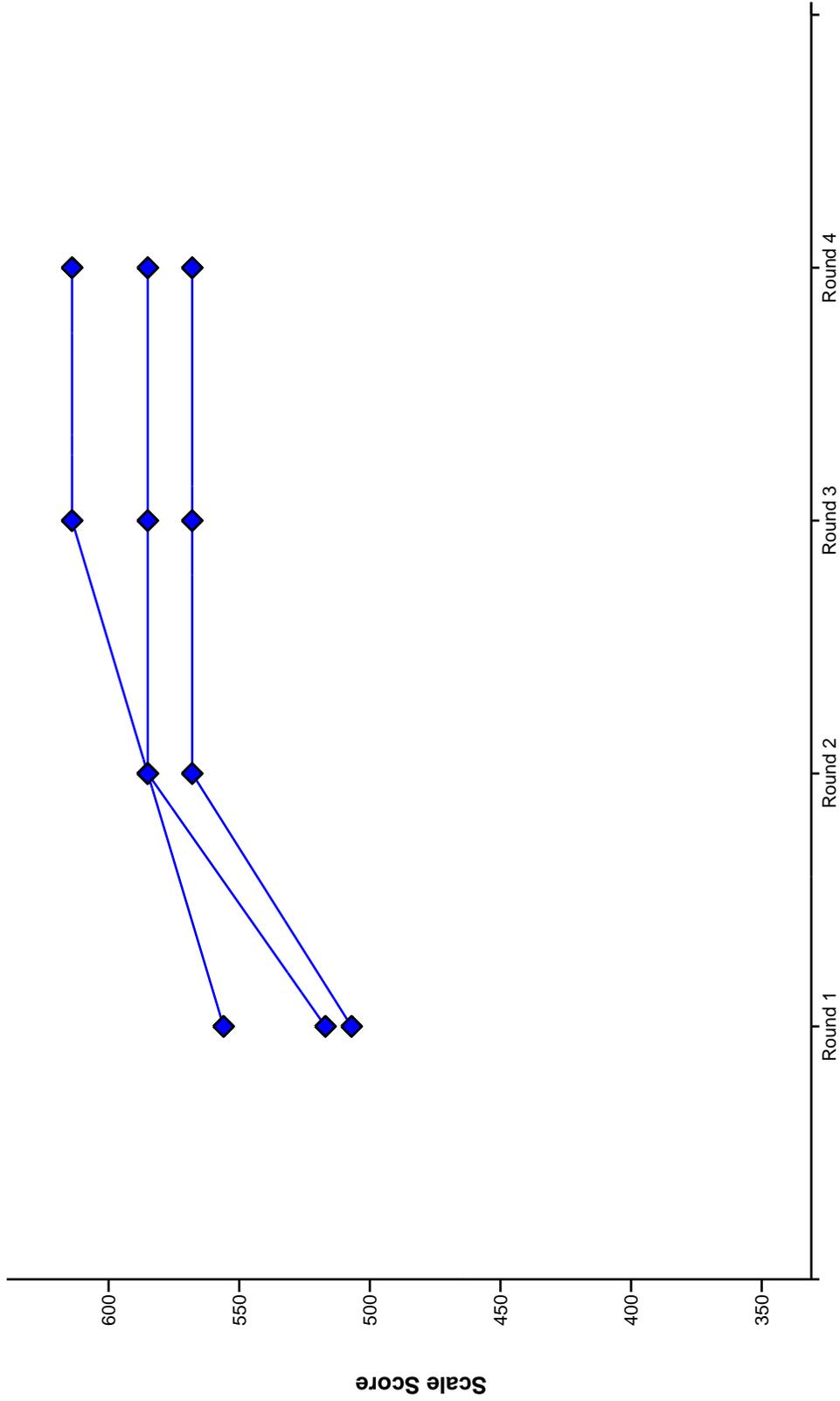


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 5 Reading Exceeds Cut Point

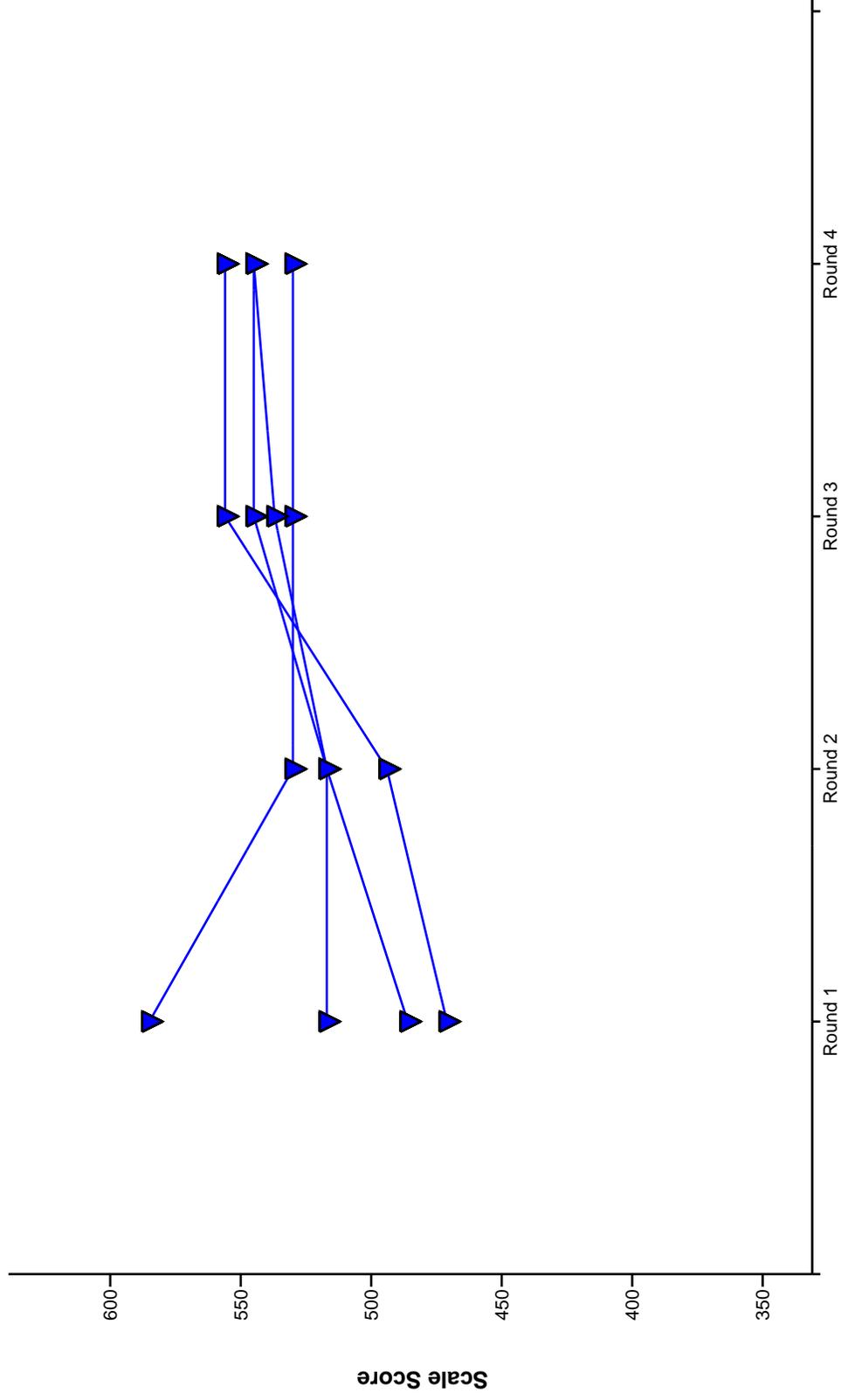
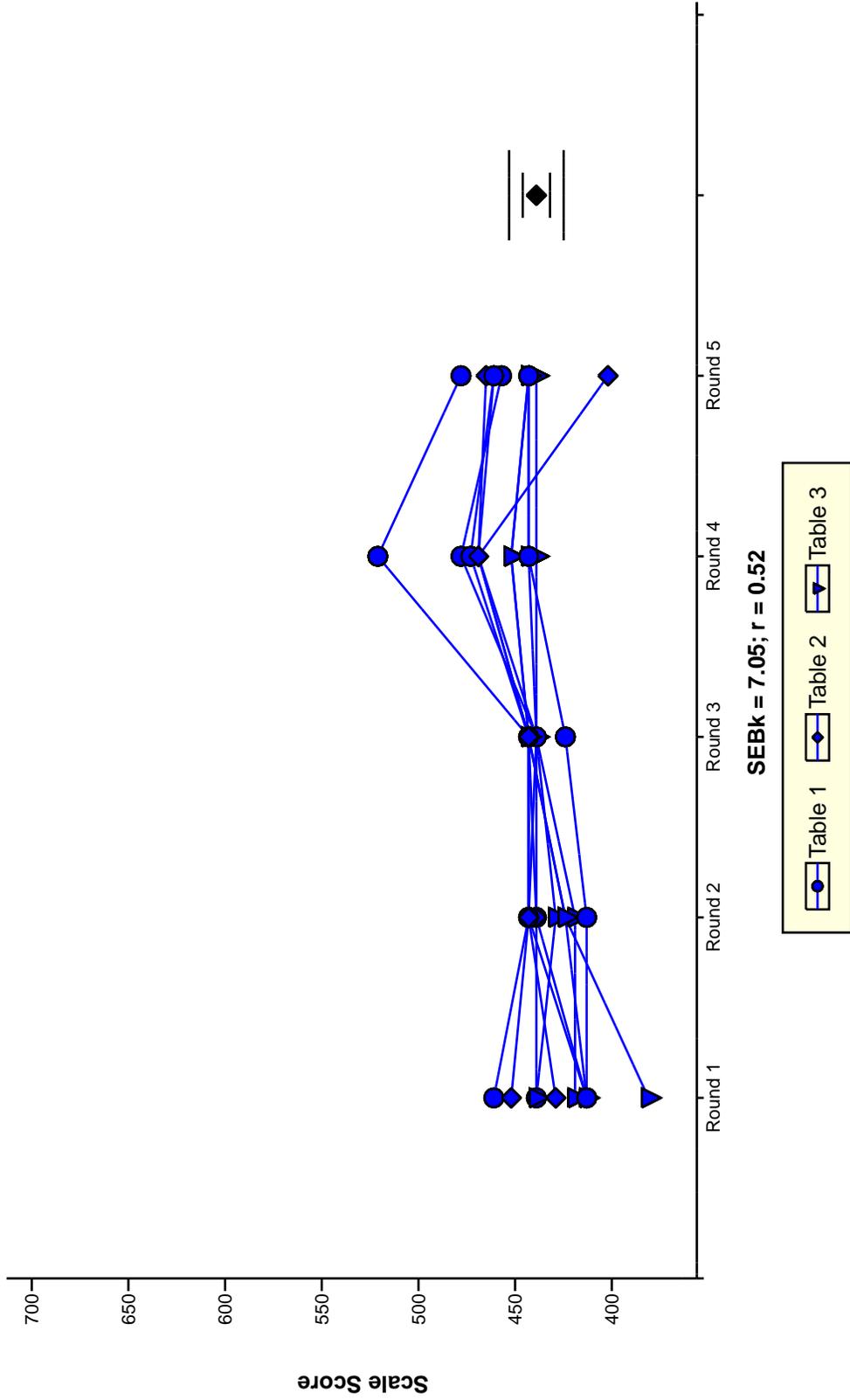


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Approaches Cut Point

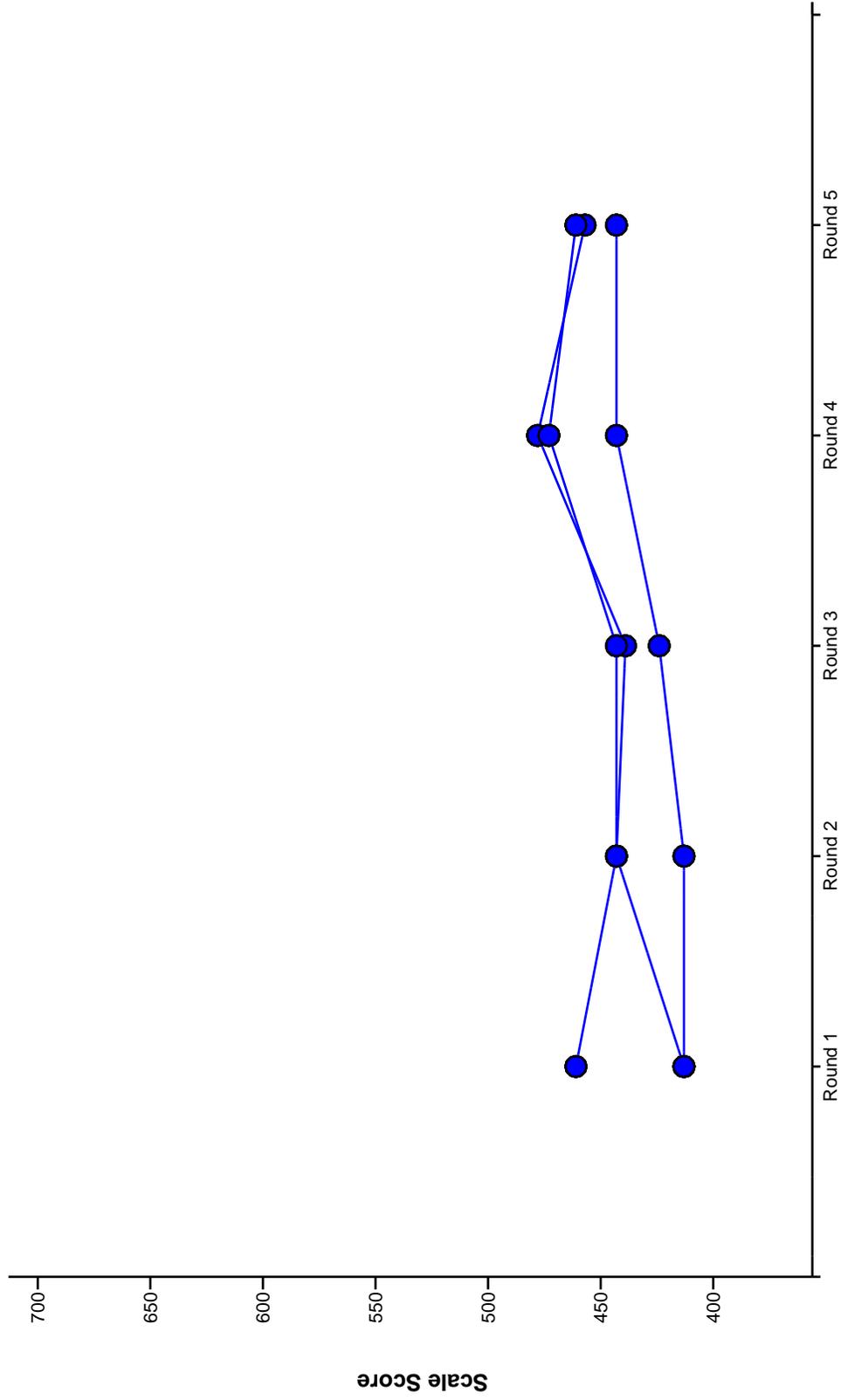


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Approaches Cut Point

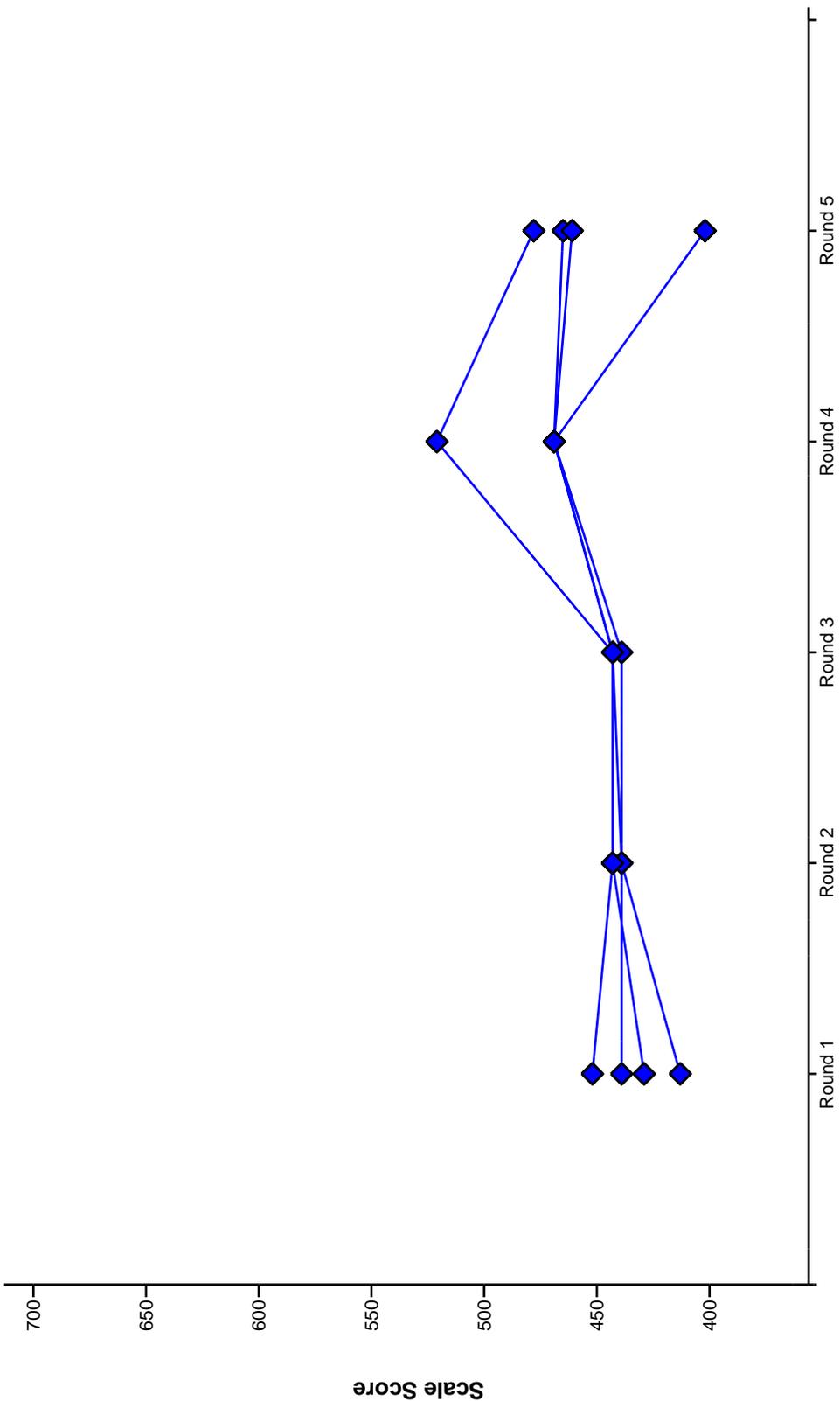


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Approaches Cut Point

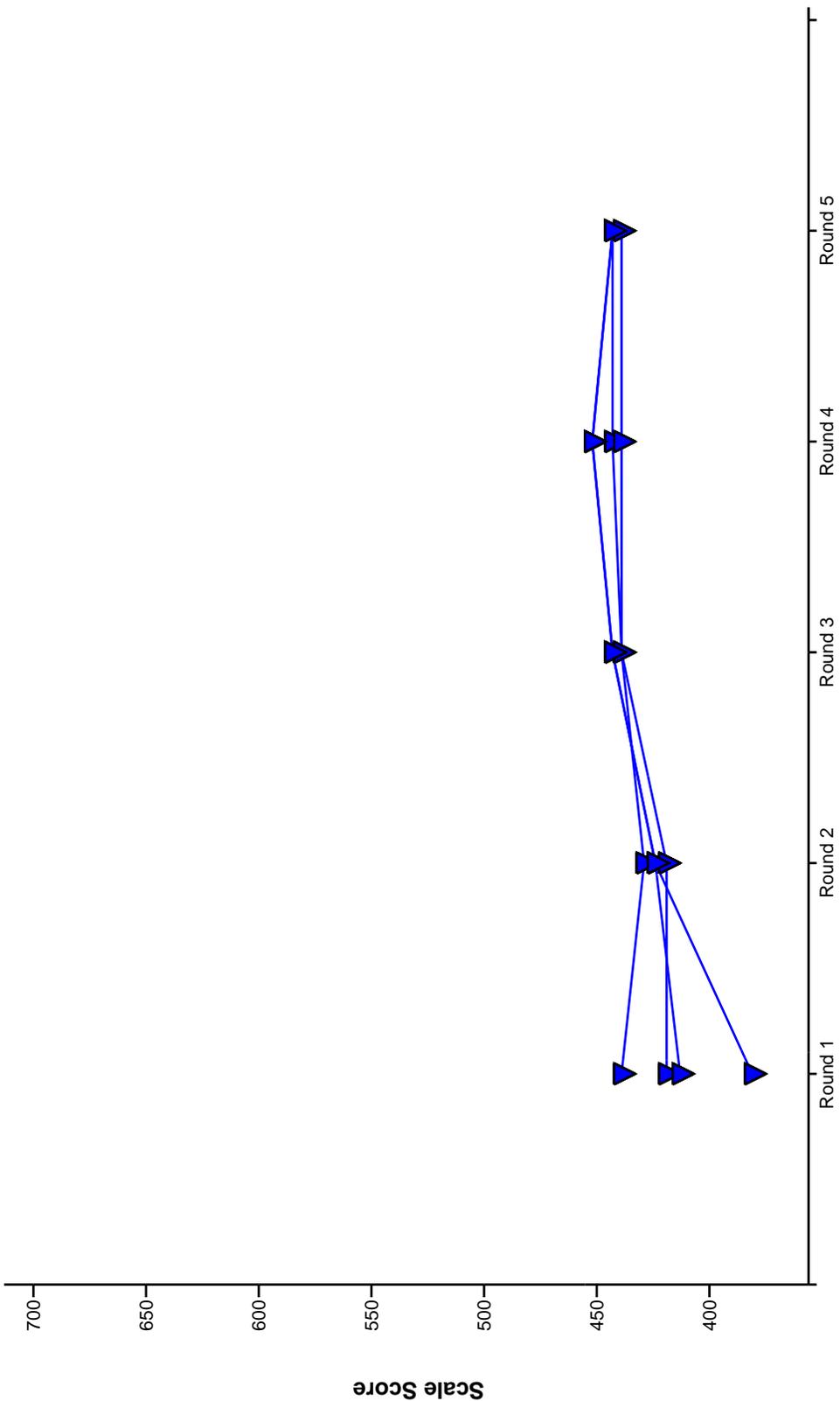
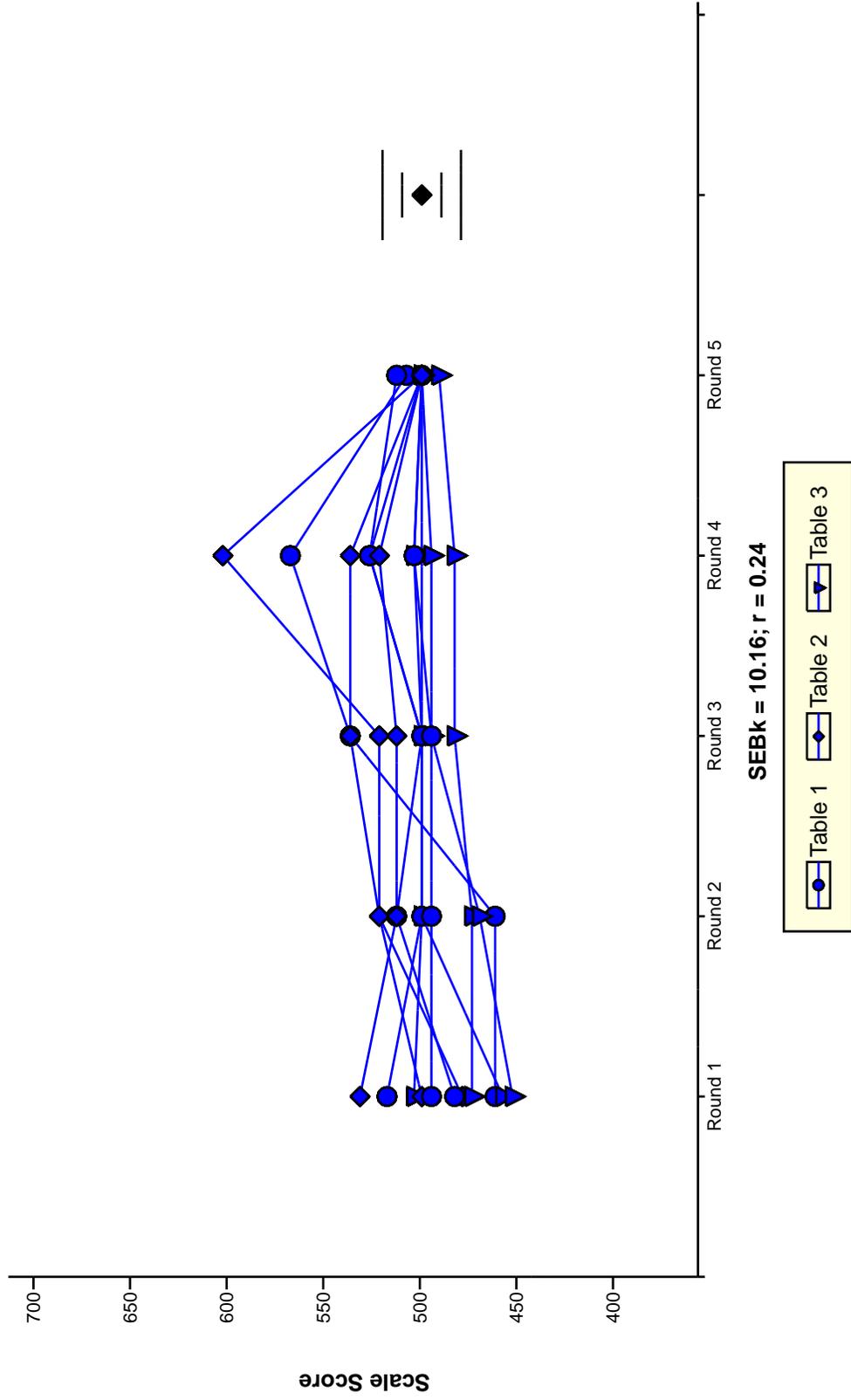


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Meets Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Meets Cut Point

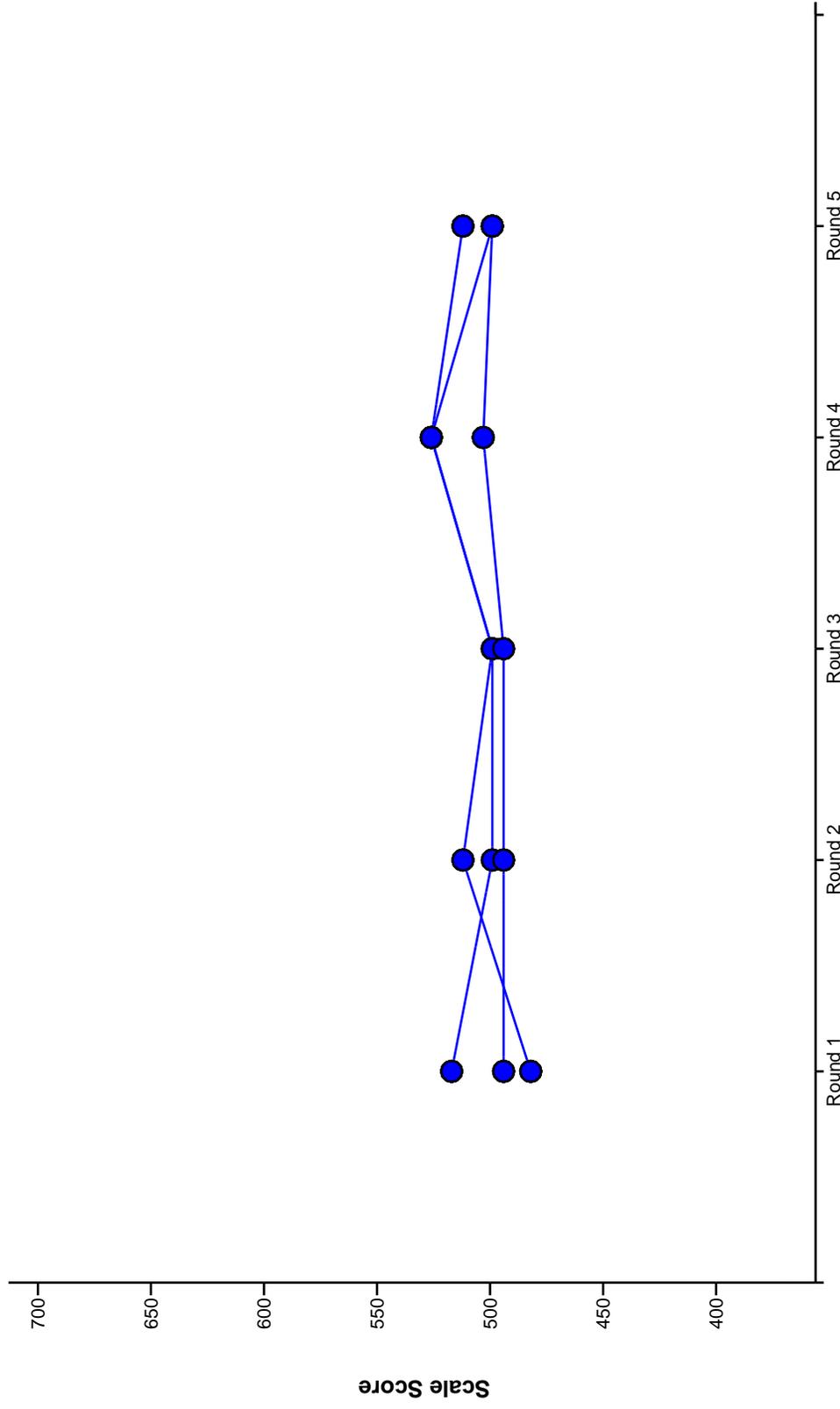


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Meets Cut Point

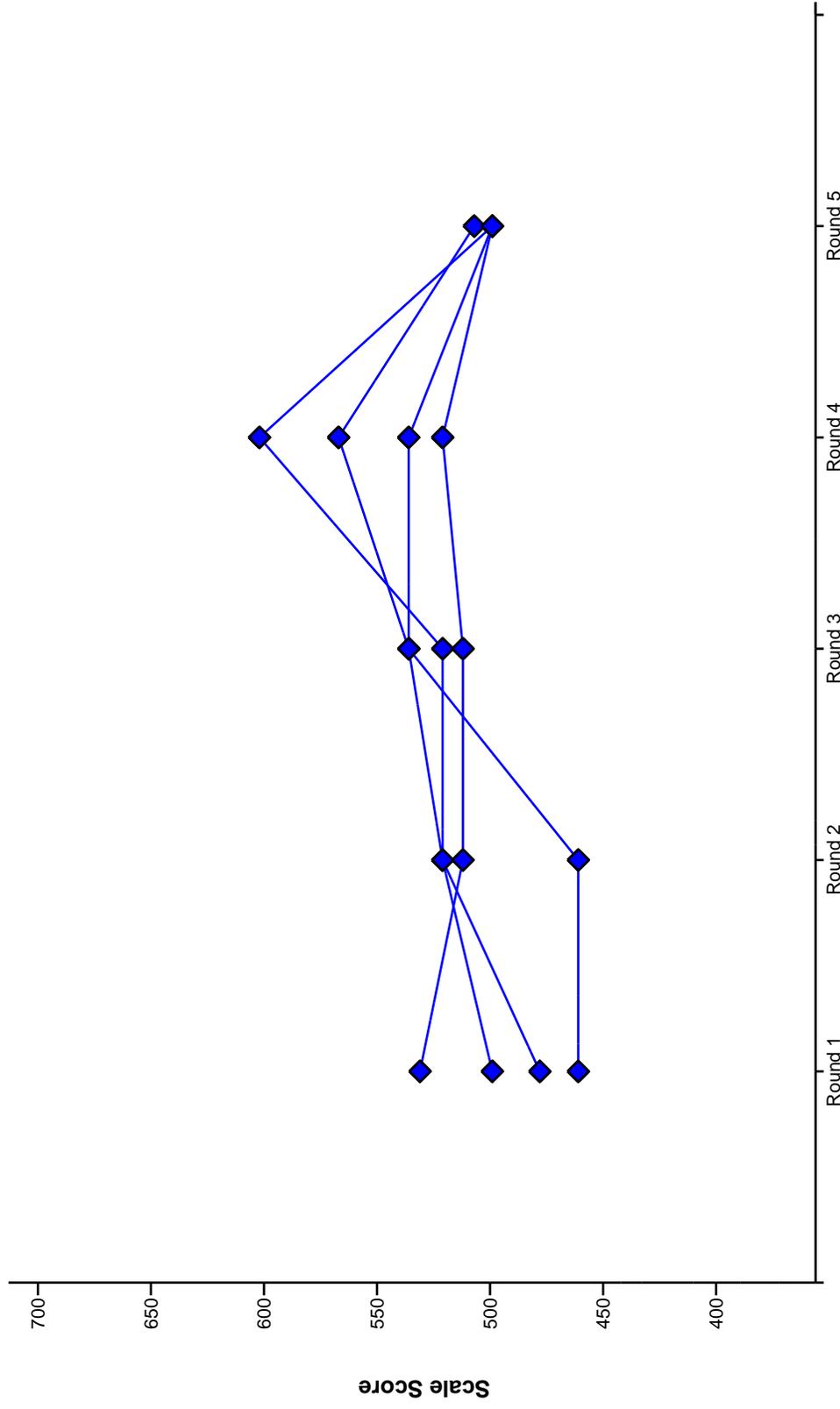


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Meets Cut Point

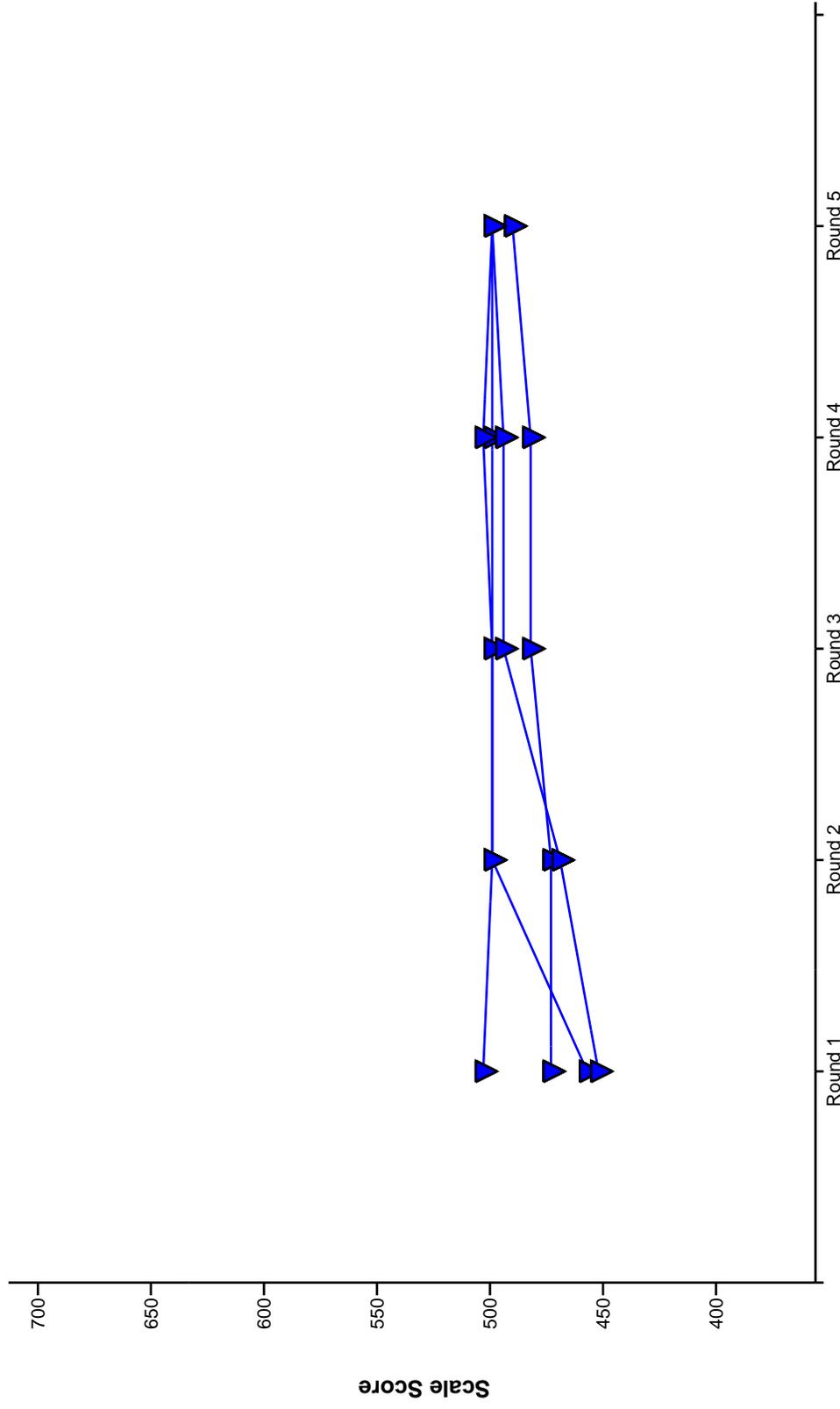
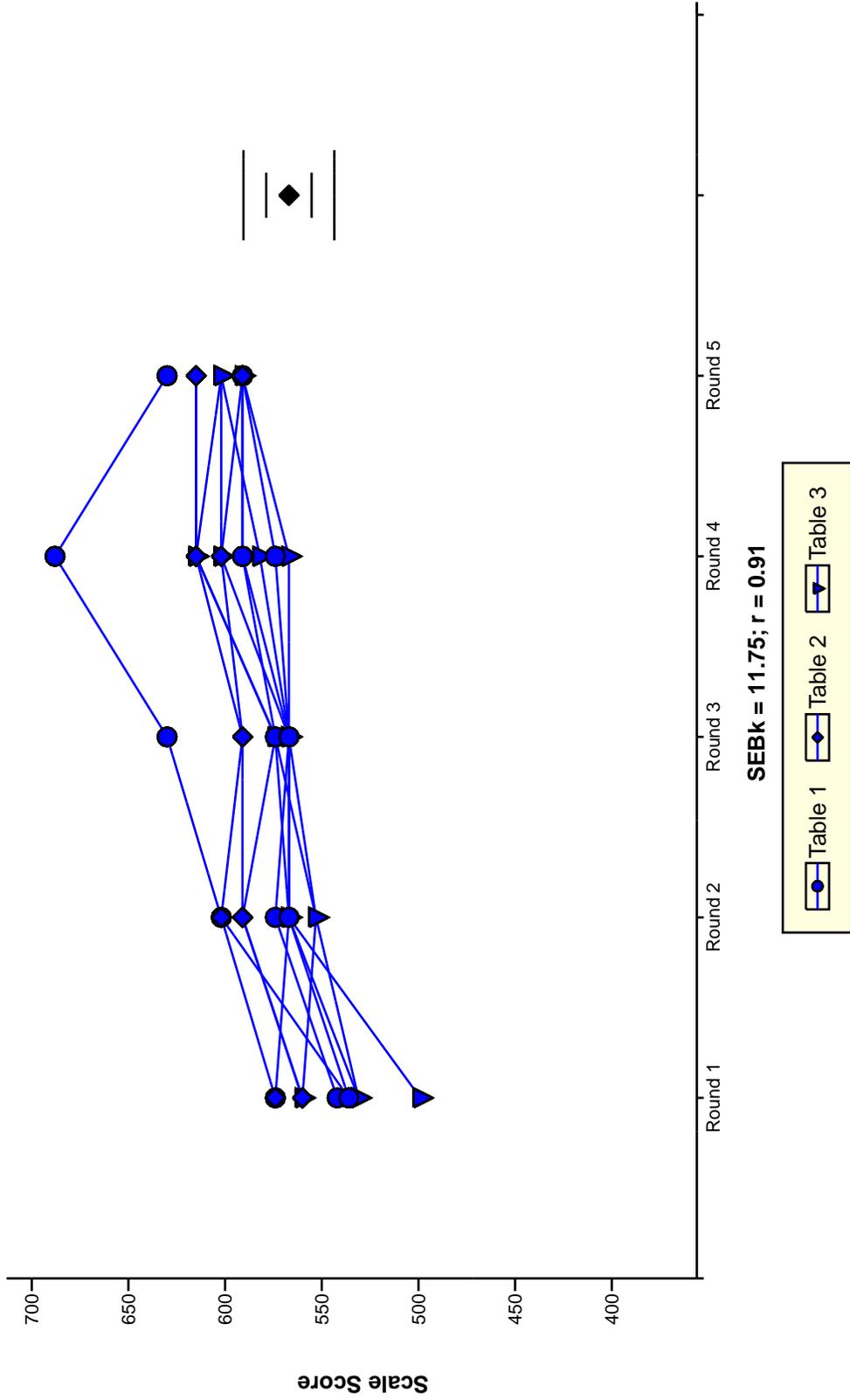


Table 3

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Exceeds Cut Point

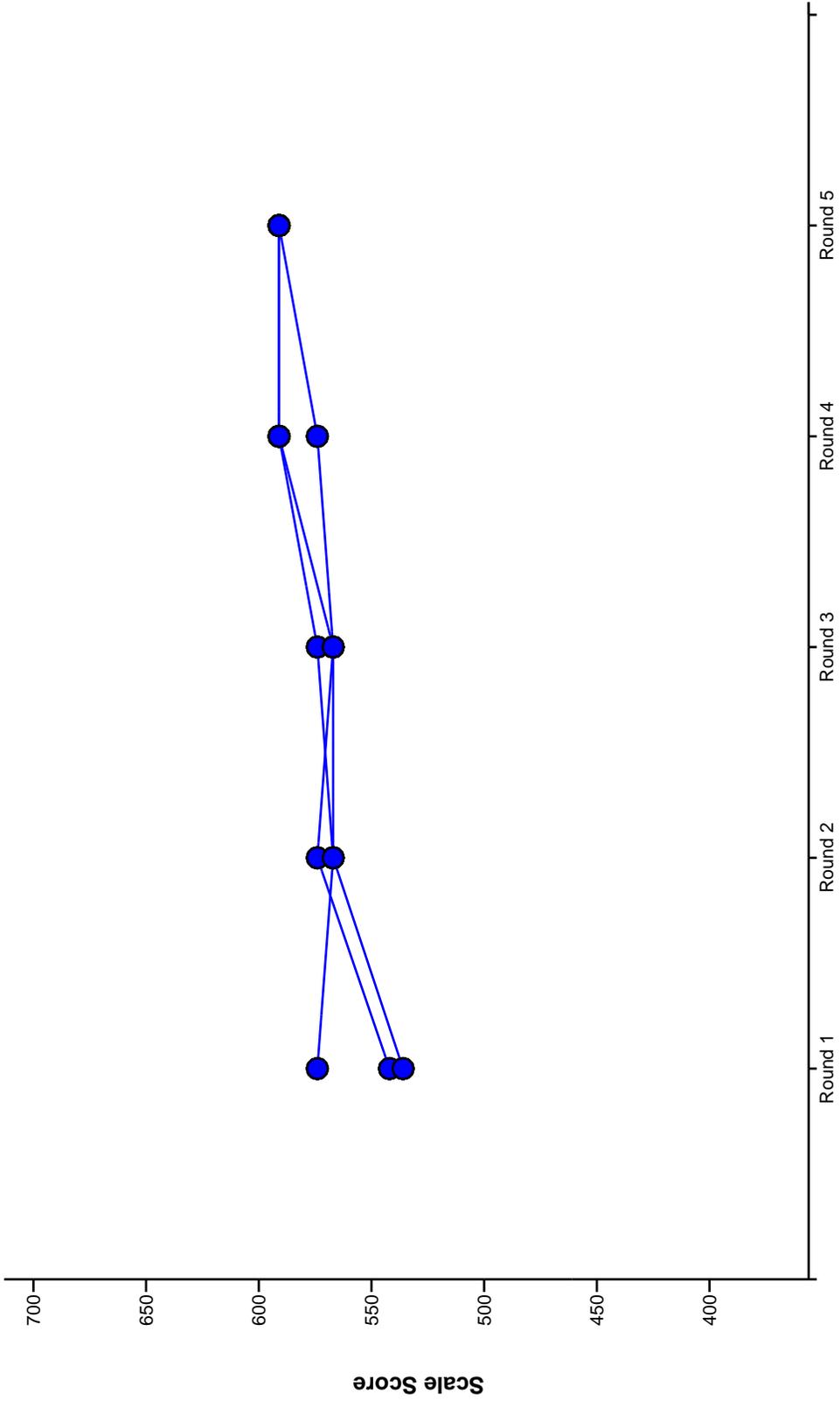


Table 1

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Exceeds Cut Point

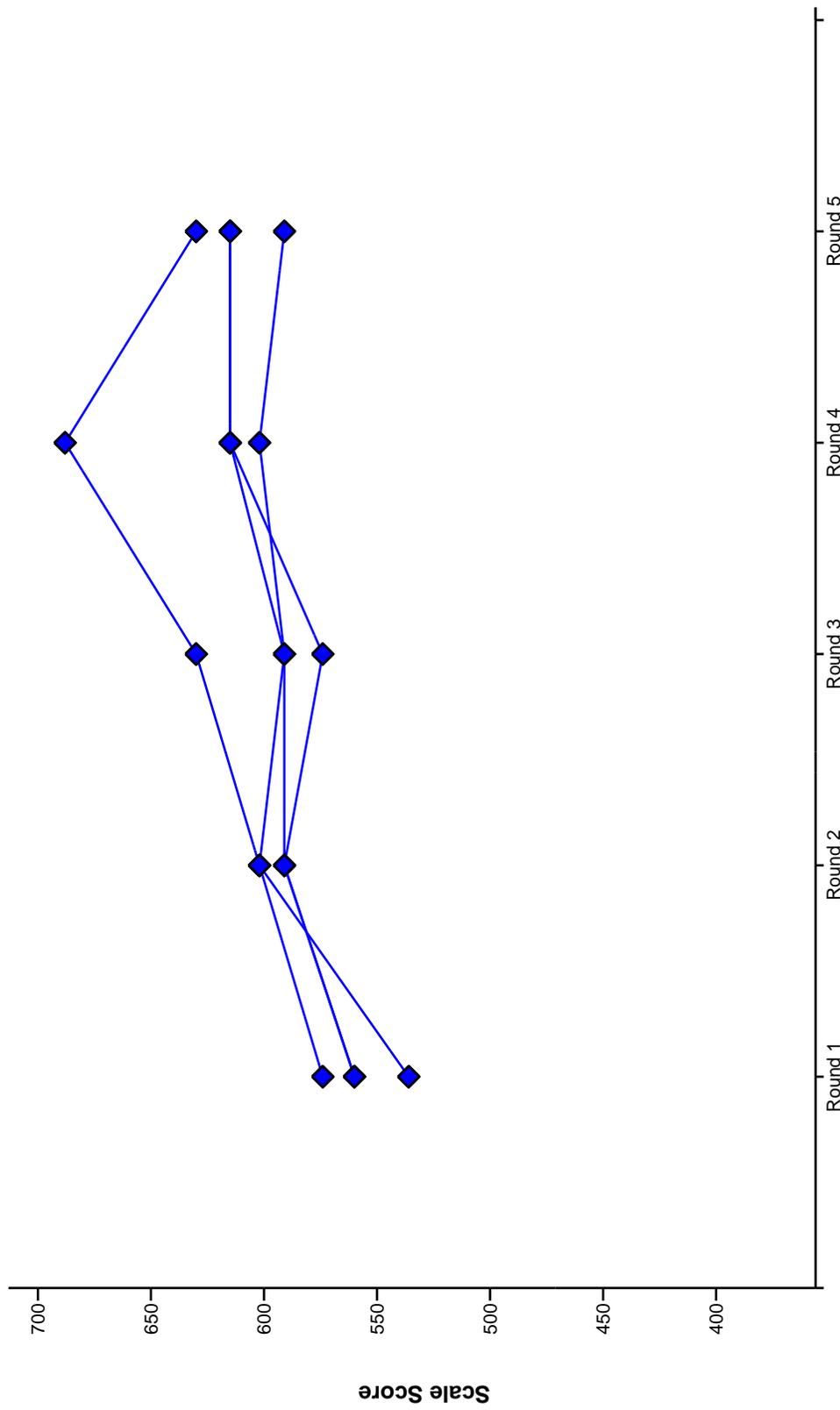


Table 2

AIMS Bookmark Standard Setting May 2005 Grade 8 Reading Exceeds Cut Point

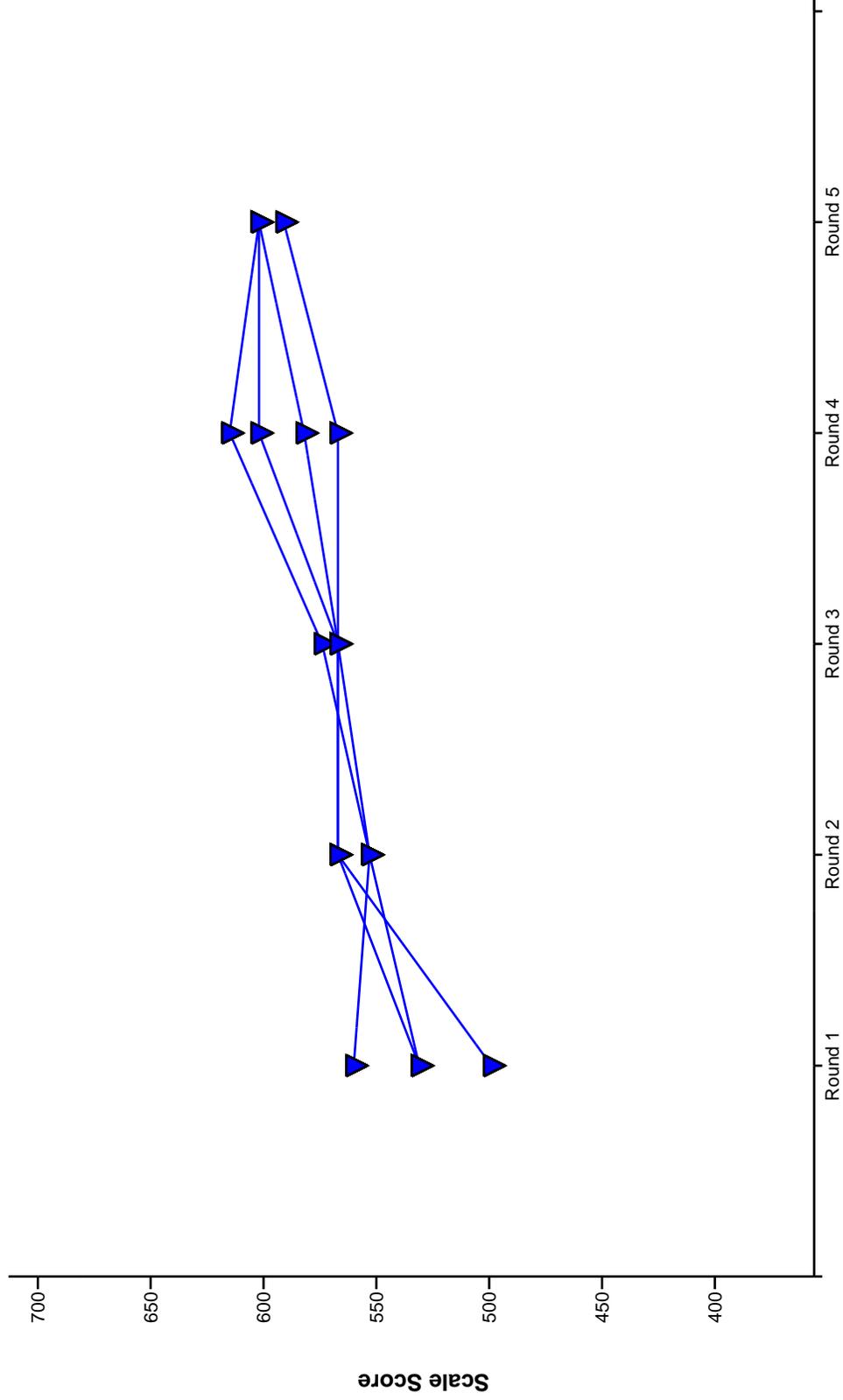
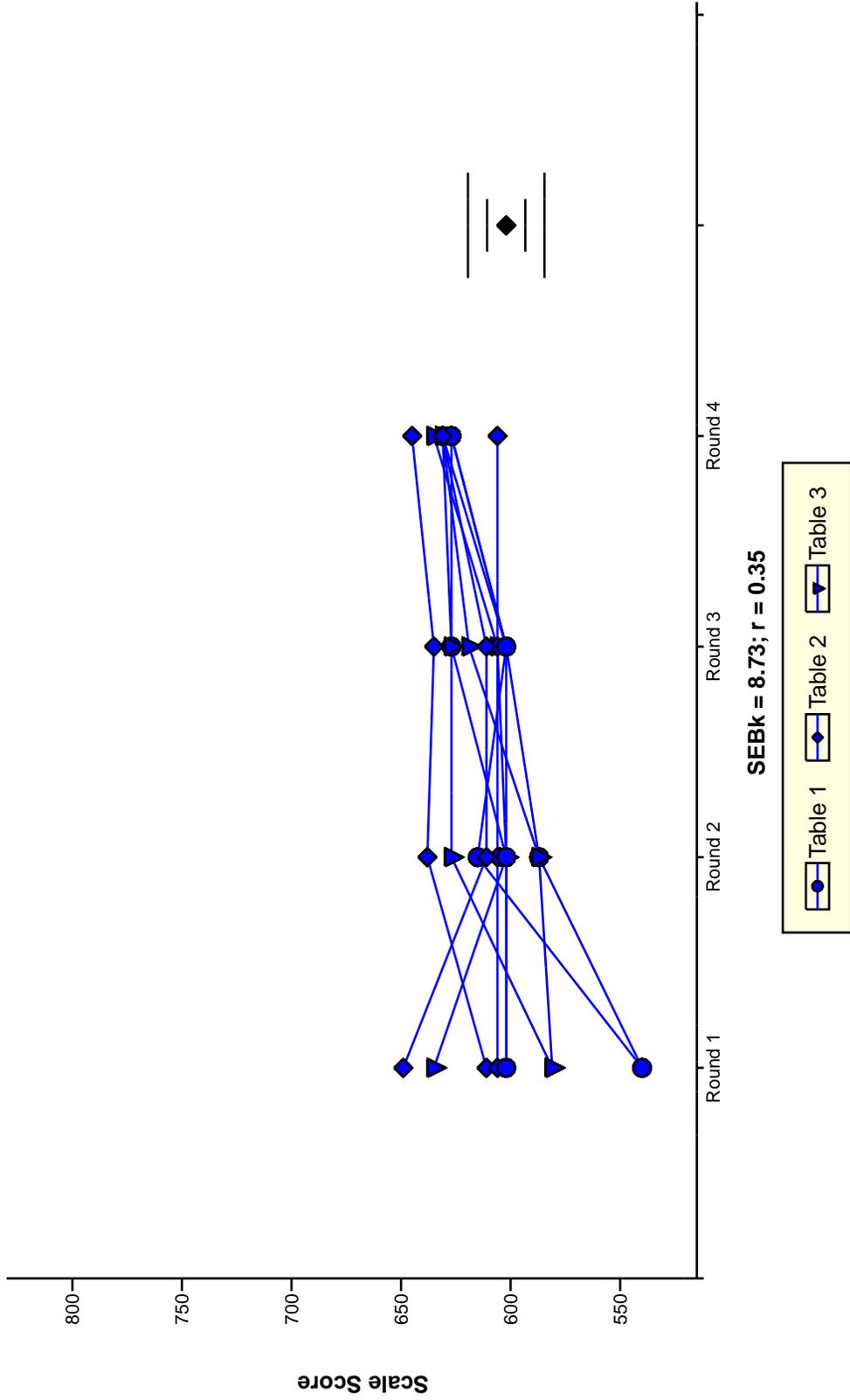


Table 3

AIMS Bookmark Standard Setting May 2005 High School Reading Approaches Cut Point



AIMS Bookmark Standard Setting May 2005 High School Reading Approaches Cut Point

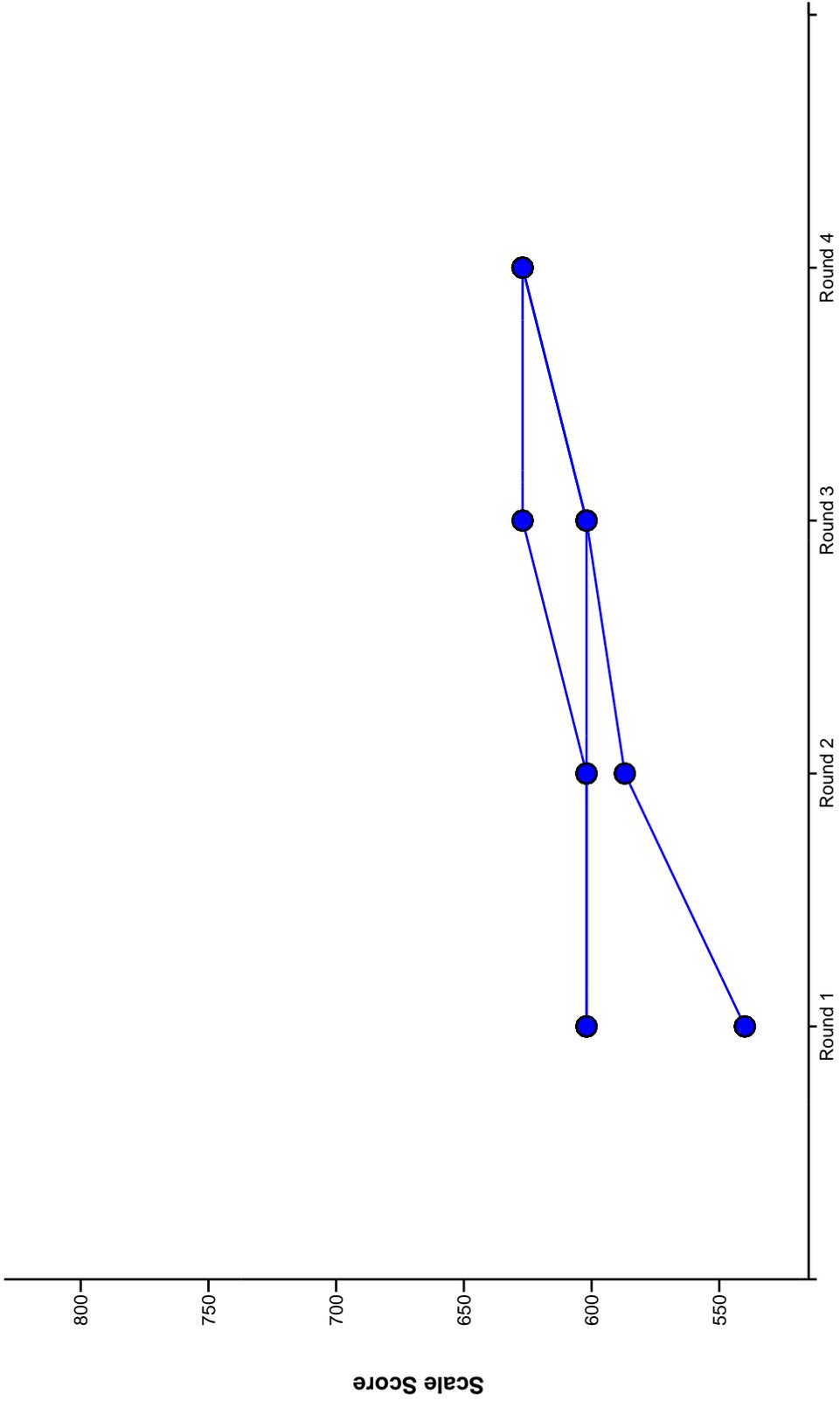


Table 1

AIMS Bookmark Standard Setting May 2005 High School Reading Approaches Cut Point

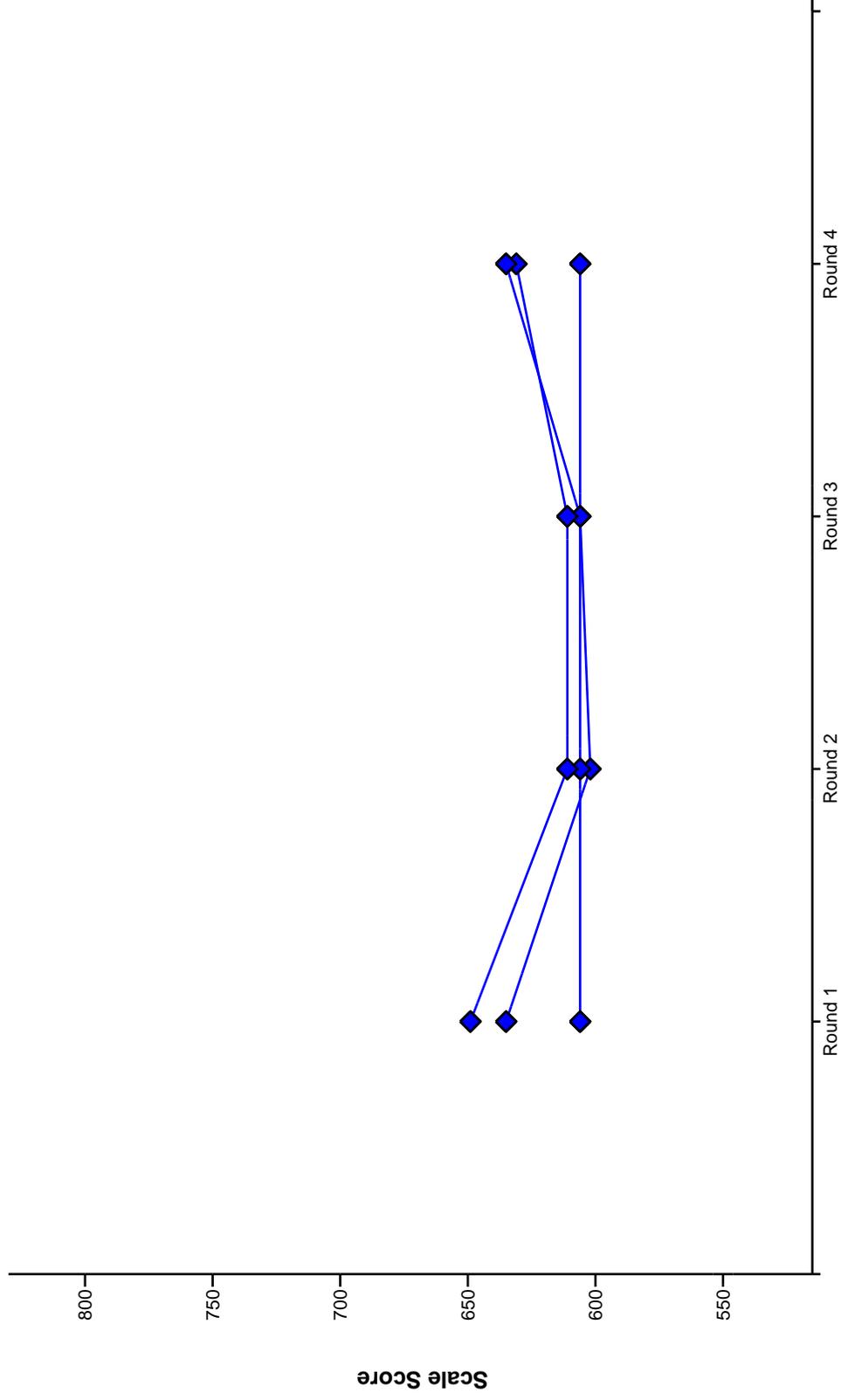


Table 2

AIMS Bookmark Standard Setting May 2005 High School Reading Approaches Cut Point

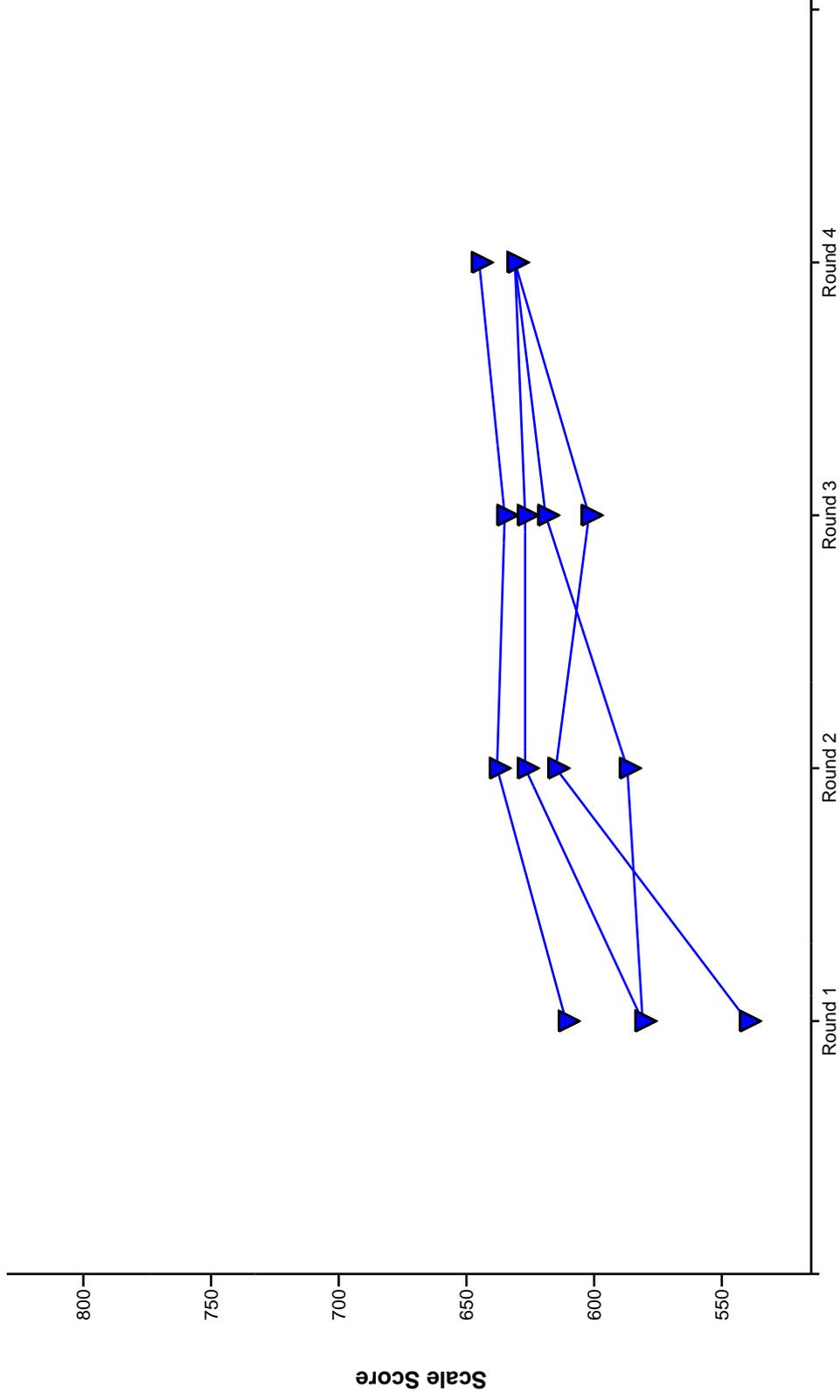
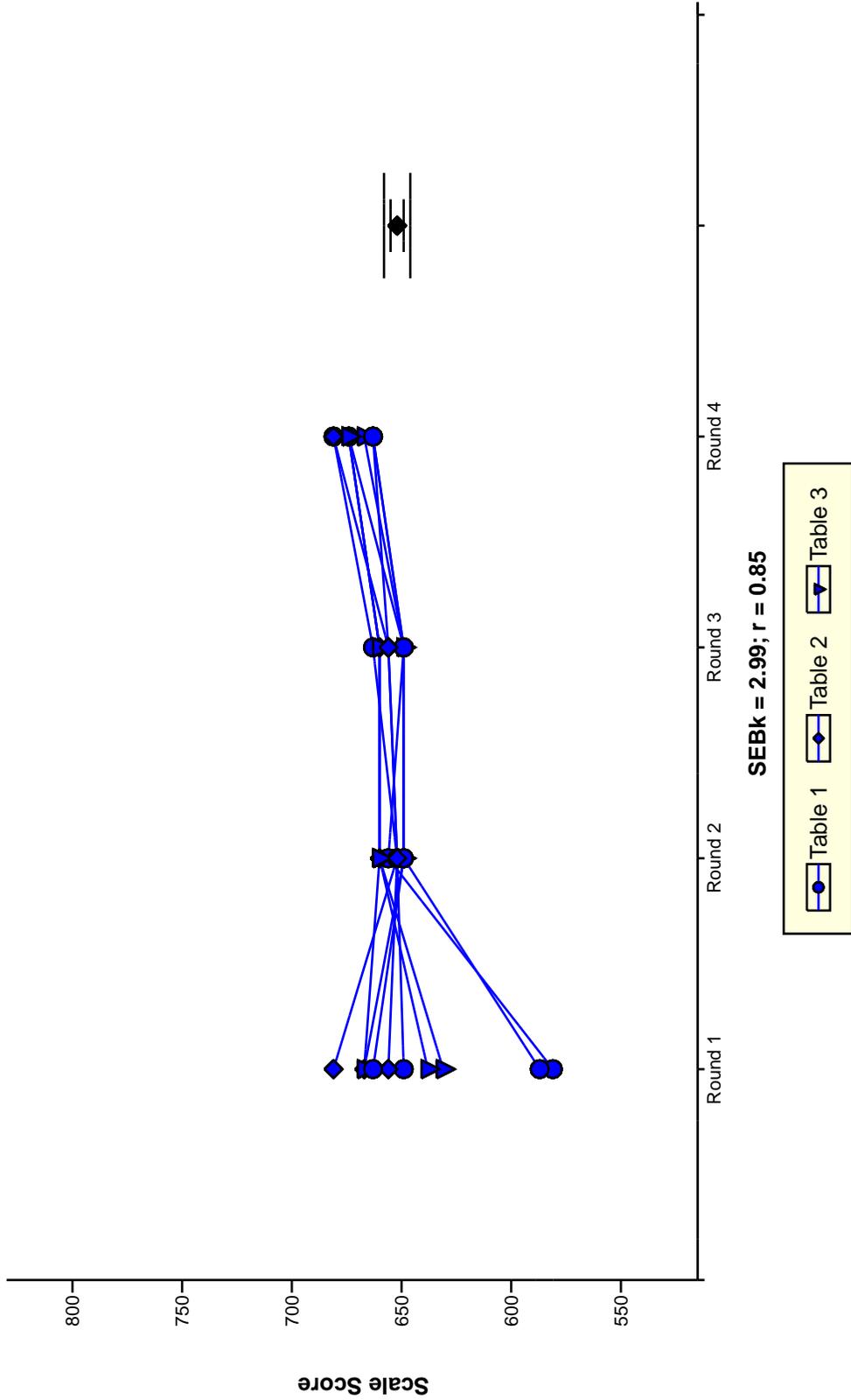


Table 3

AIMS Bookmark Standard Setting May 2005 High School Reading Meets Cut Point



AIMS Bookmark Standard Setting May 2005 High School Reading Meets Cut Point

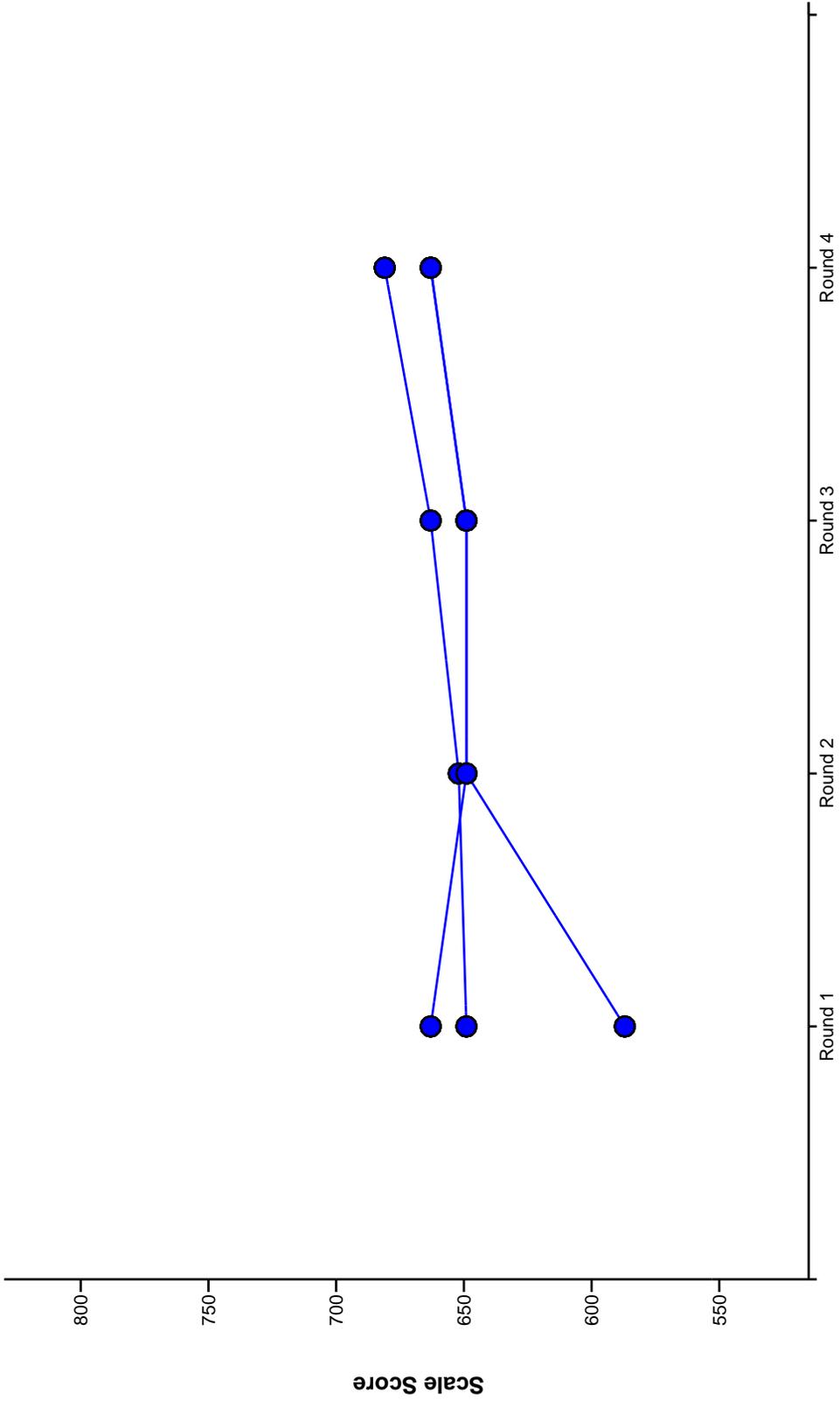


Table 1

AIMS Bookmark Standard Setting May 2005 High School Reading Meets Cut Point

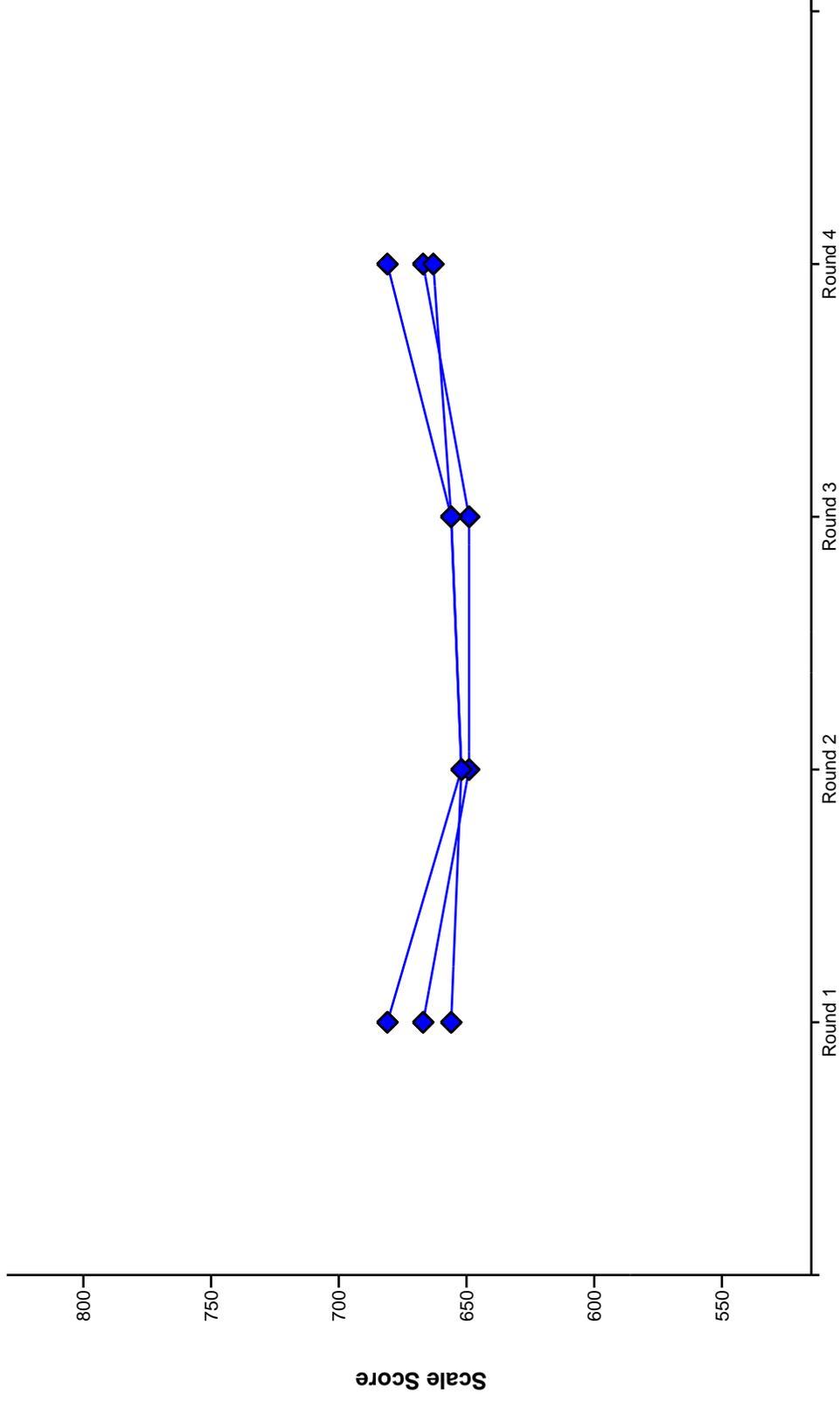


Table 2

AIMS Bookmark Standard Setting May 2005 High School Reading Meets Cut Point

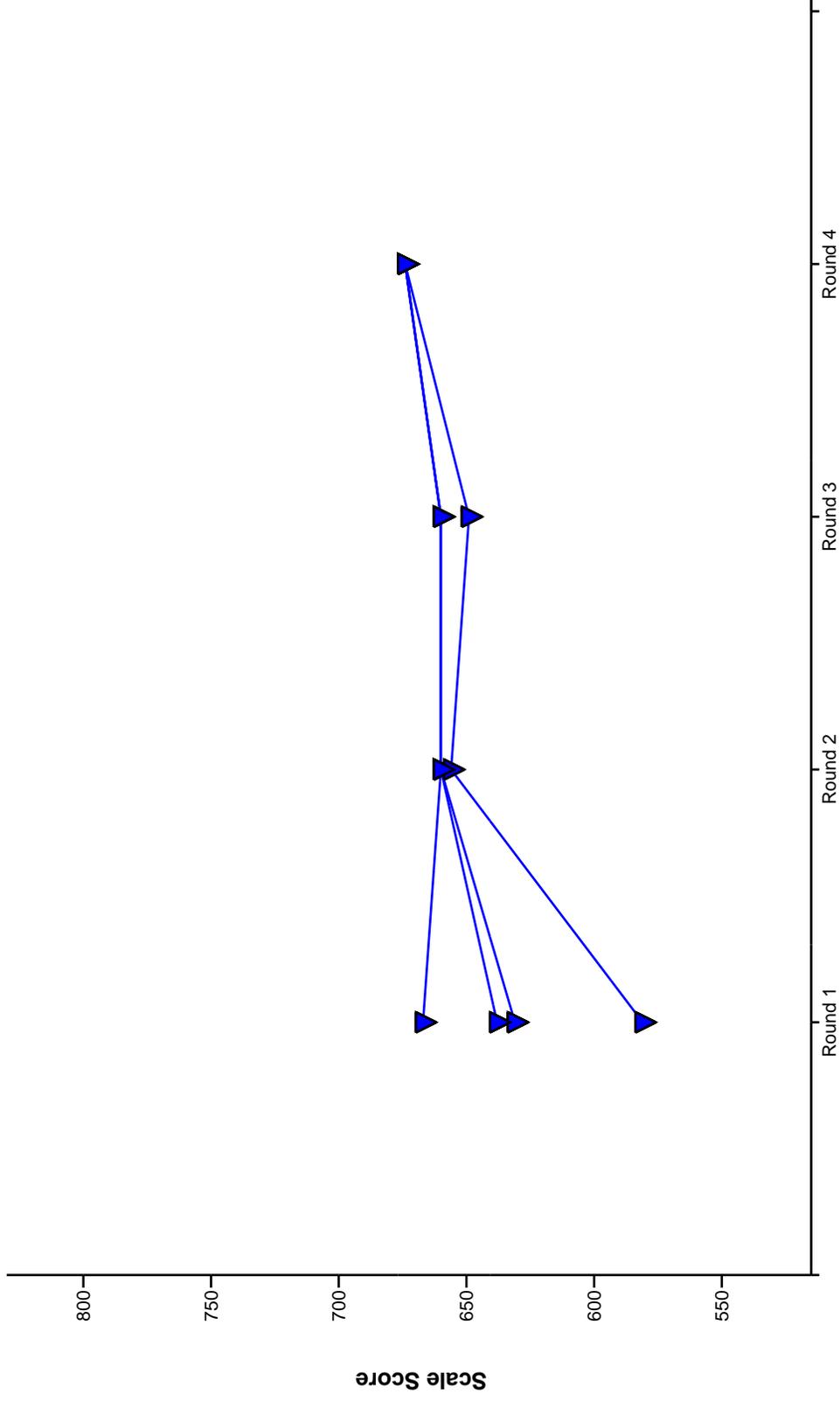
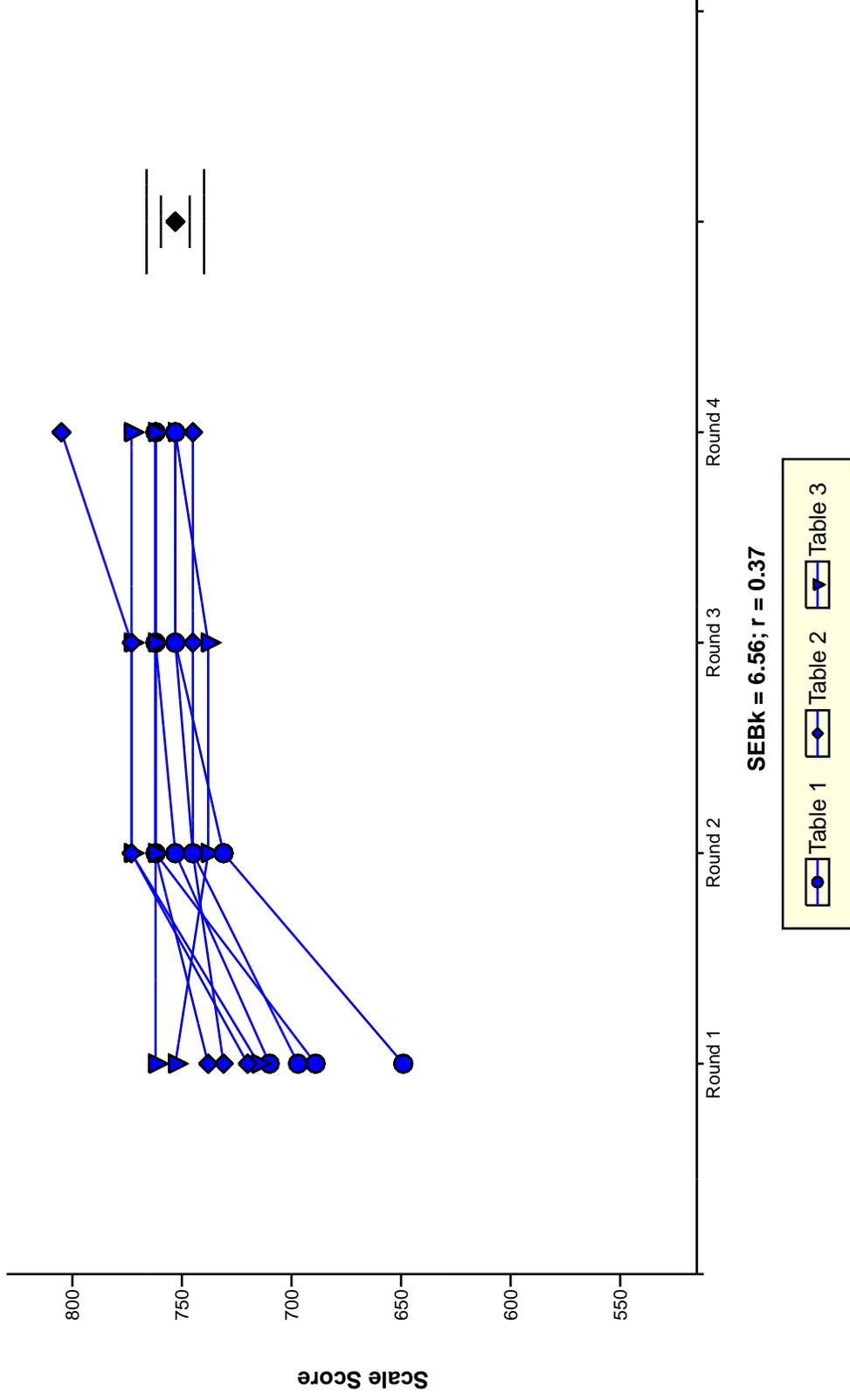


Table 3

AIMS Bookmark Standard Setting May 2005 High School Reading Exceeds Cut Point



AIMS Bookmark Standard Setting May 2005 High School Reading Exceeds Cut Point

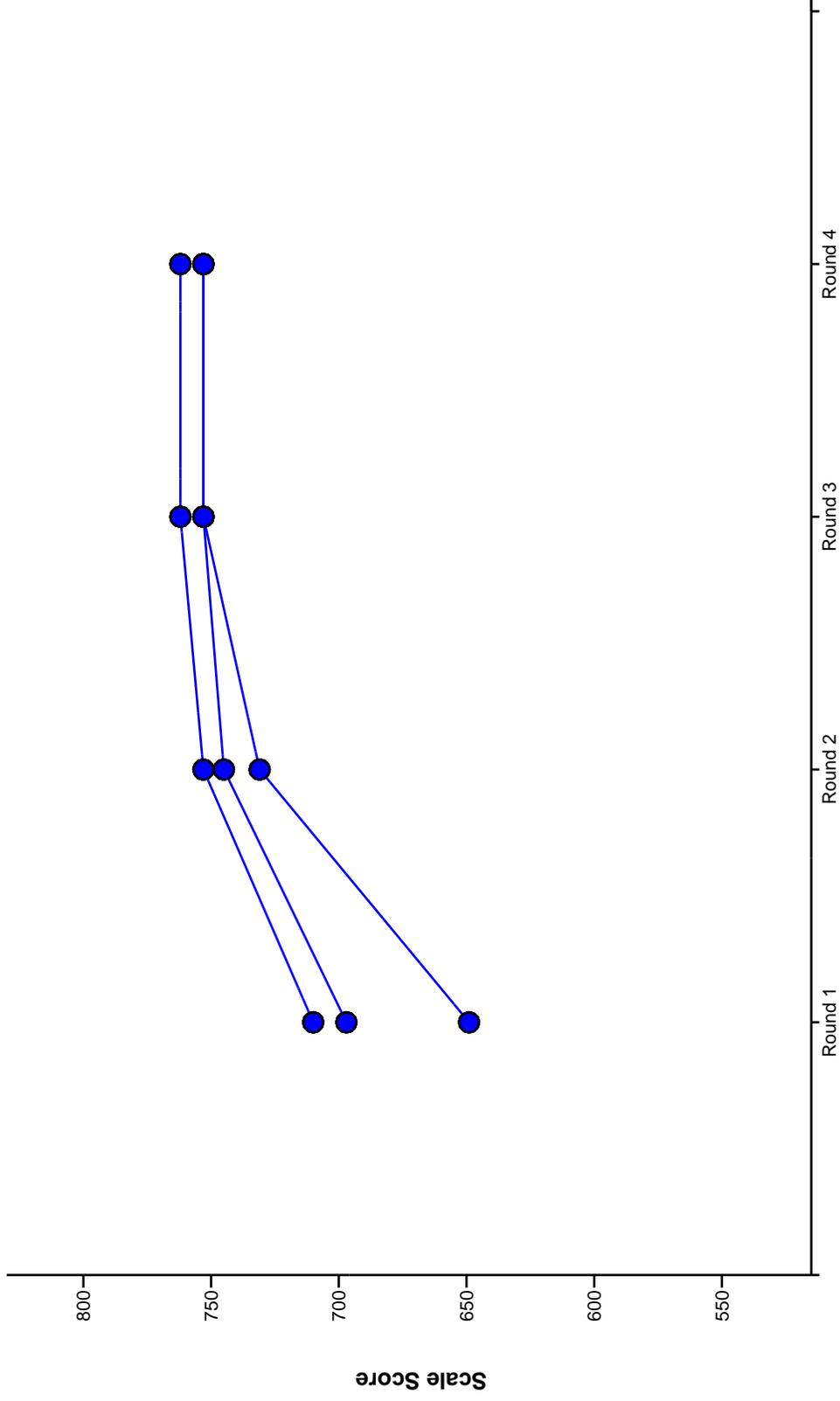


Table 1

AIMS Bookmark Standard Setting May 2005 High School Reading Exceeds Cut Point

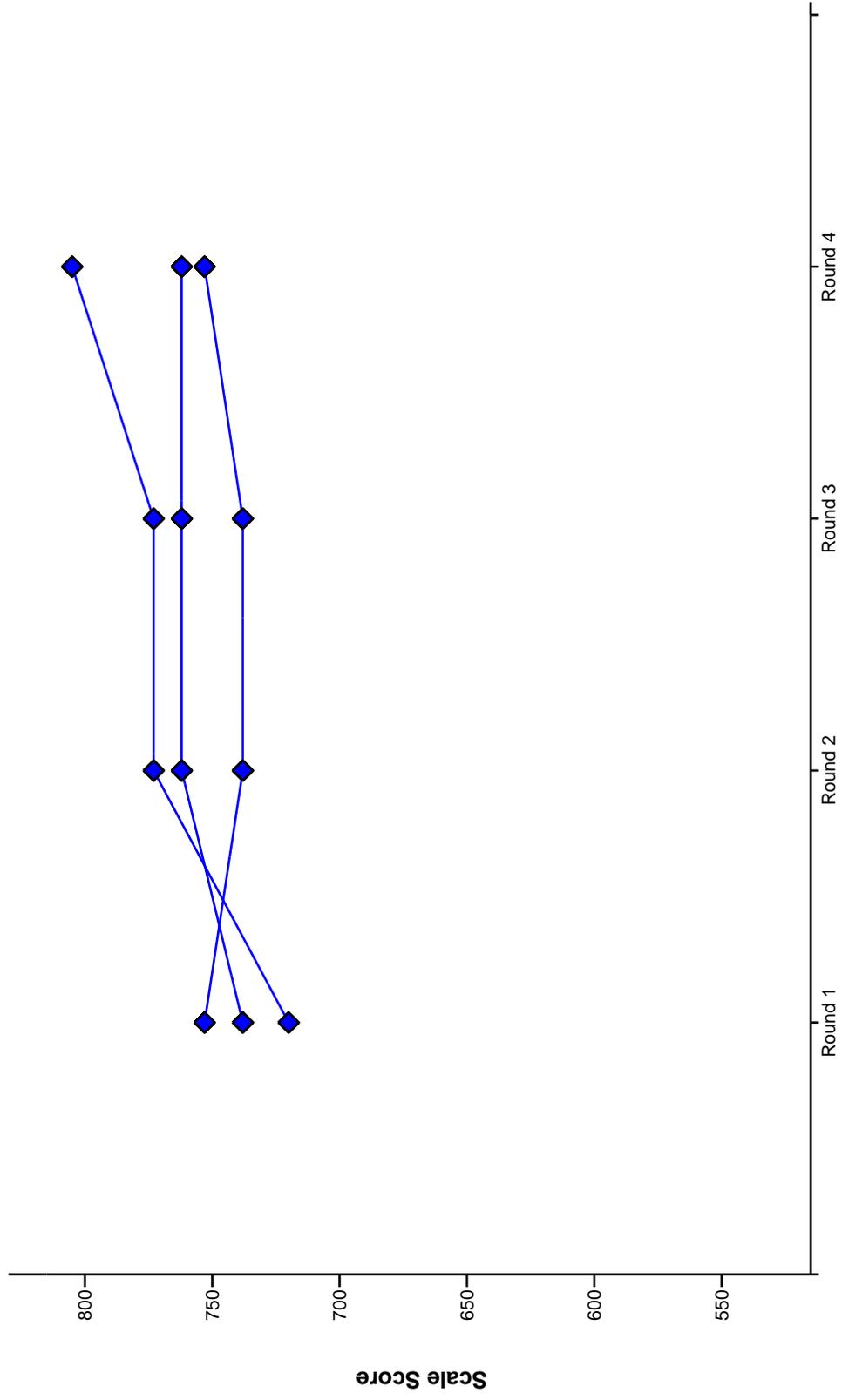


Table 2

AIMS Bookmark Standard Setting May 2005 High School Reading Exceeds Cut Point

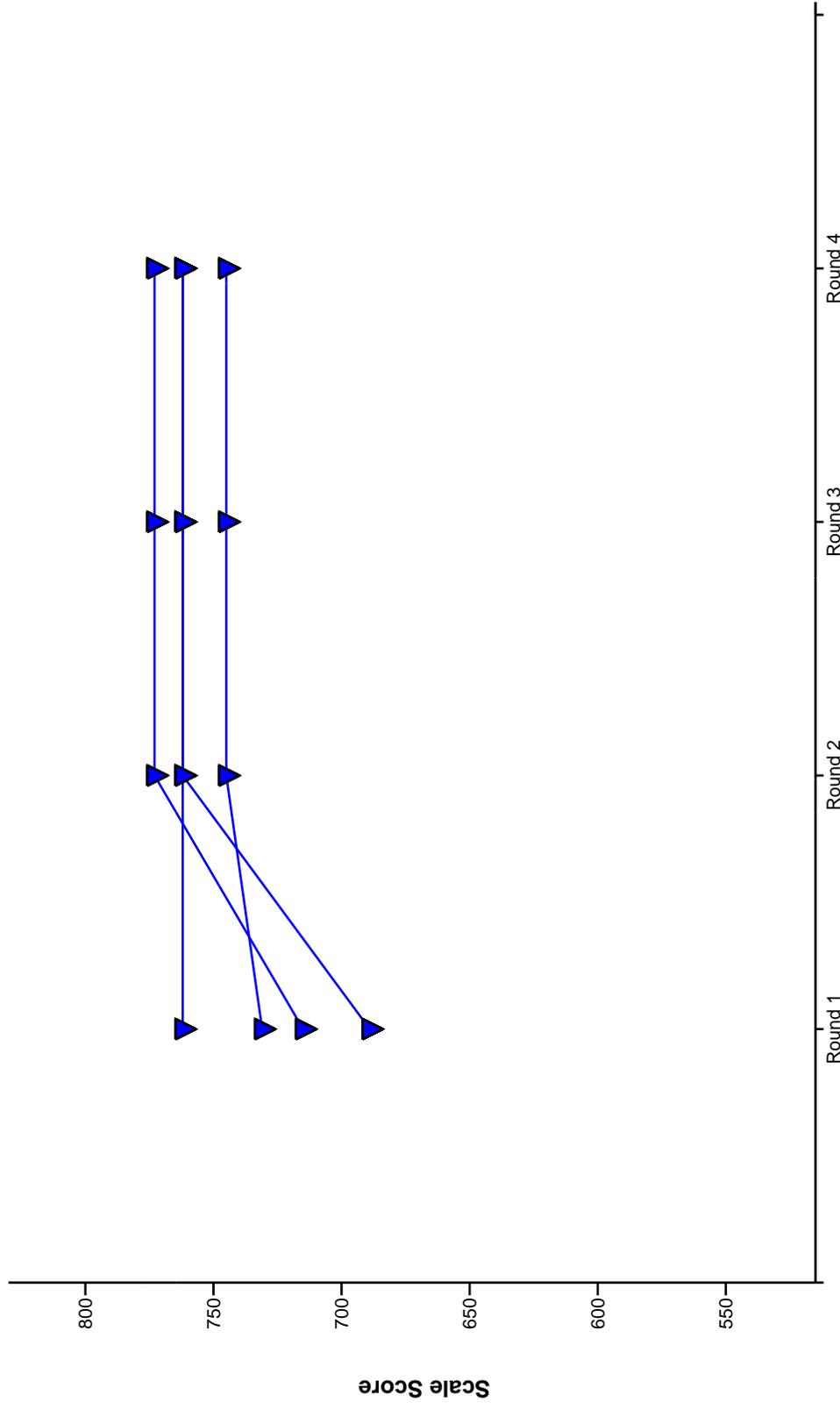


Table 3

Section J

Cut Scores and Associated Impact Data for Grades 3 Through 8 and High School Mathematics and Reading Approved by the Arizona State Board of Education May 12, 2005 J1

Participant letters from Mathematics and Reading to the Arizona State Board of Education after Cross-grade Smoothing J2 to J3

Following the standard setting, cut scores were interpolated for Grades 4, 6, and 7 from the cuts set for Grades 3, 5, and 8. Section J presents the final cut scores and estimated impact data for Grades 3 through 8 and high school for the AIMS tests for Mathematic and Reading, as approved by the Arizona State Board of Education on May 12, 2005.

Table 1. Mathematics Cut Scores for Grades 3 Through 8 and High School

MATHEMATICS	Grade						
	3	4	5	6	7	8	HS
Approaches	386	414	442	463	484	505	668
Meets	420	448	476	496	517	537	683
Exceeds	492	521	550	574	599	623	750

Table 2. Mathematics Associated Estimated Impact Data for Grades 3 Through 8 and High School Grade 10

MATHEMATICS	Grade						
	3	4	5	6	7	8	HS
Falls Far Below	9.5%	12.0%	11.5%	15.6%	13.0%	16.5%	21.7%
Approaches	18.5%	17.1%	19.2%	18.8%	20.5%	19.1%	11.7%
Meets	51.1%	49.7%	49.7%	44.7%	52.1%	50.7%	49.4%
Exceeds	20.9%	21.3%	19.6%	20.9%	14.5%	13.6%	17.2%

Table 3. Reading Cut Scores for Grades 3 Through 8 and High School

READING	Grade						
	3	4	5	6	7	8	HS
Approaches	379	402	424	433	443	452	627
Meets	431	450	468	478	489	499	674
Exceeds	516	536	556	571	587	602	773

Table 4. Reading Associated Estimated Impact Data for Grades 3 Through 8 and High School Grade 10

READING	Grade						
	3	4	5	6	7	8	HS
Falls Far Below	8.7%	11.1%	9.4%	9.7%	8.0%	7.9%	7.6%
Approaches	24.8%	24.0%	23.0%	21.8%	24.0%	23.2%	21.2%
Meets	56.2%	55.6%	58.7%	58.8%	58.8%	59.9%	62.9%
Exceeds	10.3%	9.3%	9.0%	9.7%	9.1%	9.0%	8.3%

To: State Board of Education
From: Mathematics Table Leaders
RE: Smoothing of Mathematics

May 11, 2005

These are the changes that were made with agreement of all mathematics table leaders:

- At the 5th & 8th grade levels, cut scores for *Approaches* the Standard were each increased in order to smooth the transition from 3rd grade to high school. This resulted in the percentage of students *Falling Far Below* increasing slightly across the grades.

Rationale: Mathematics is based on a foundation of skills and knowledge. Gaps of knowledge increase over time for struggling students, and this is reflected in the data. This makes the building of new knowledge increasingly more difficult as students progress through the grades.

Actual change: 5th grade raw score was increased by 2 items for *Approaches* the Standard. 8th grade was increased by 4 items.

- At the 8th grade level, cut score for *Meets* the Standard was lowered in order to smooth the transition from 5th to high school. This increases the percentage of students meeting the standard.

Rationale: The 8th grade *Meets* cut score appeared to be out of line across grades; therefore, the decision was made to return to the cut score from the previous round.

Actual change: 8th grade raw score was decreased by 5 items for *Meets* the Standard.

To: State Board of Education
From: Reading Table Leaders
RE: Smoothing of Reading

May 11, 2005

Considering the p-value or proportion of students who answered items correctly, we re-considered our 'falls far below' and 'exceeds' categories. In the interest of smoothing and eliminating dips and bumps between grade levels, we broadened the approaches category. In most cases we increased by one to two items. This addition equalized or leveled the differences between grade levels.

We considered the statistical factors and the impact of correlation between student learning and factors in students' developmental stages. For example, the fifth grade student developmentally may not be ready to answer abstract questions; however, this expectation increases for eighth graders and then again for tenth graders. In addition, supporting the groups' belief that the 'exceeds' category should truly reflect mastery at each grade level, we adjusted the bookmarks for the 'exceeds' category.

These cut scores considered the target student, the percent of items answered correctly, and the impact data. We believe our recommended cut scores are fair, reasonable, and attainable by Arizona students.