



**PAWS
Mathematics
Grade 6**

**Released Items
With Data**

2011

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3337207

00 Which of these terms describes two lines that intersect to form 90° angles?

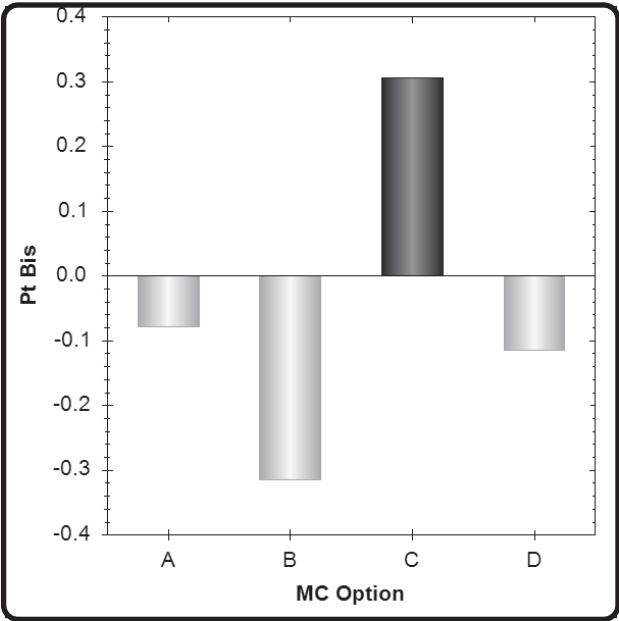
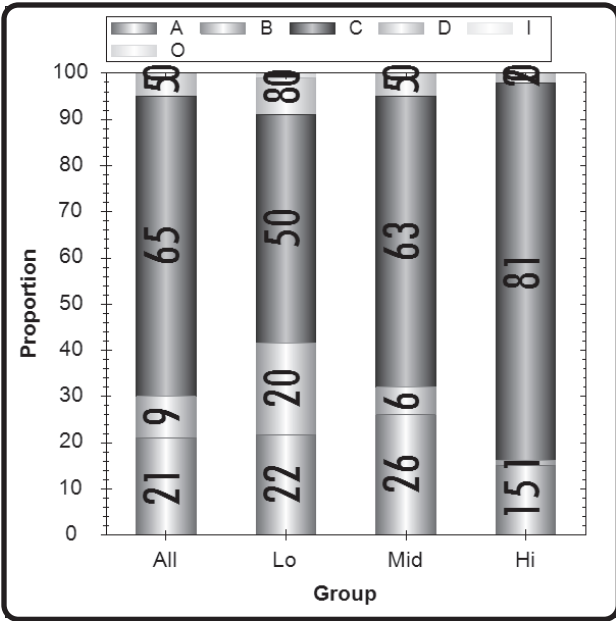
- Ⓐ Corresponding
- Ⓑ Parallel
- Ⓒ Perpendicular
- Ⓓ Skew

Grade 6 Item # 18	Math OP11	CID 3337207 6G.1.a
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Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	C	6375	0.651	0.306

	A	B	C	D	Inv	Omit
All	21	9	65	5	0	0
Low Scorers	22	20	50	8	0	1
Middle Scorers	26	6	63	5	0	0
High Scorers	15	1	81	2	0	0

A	B	C	D
-0.079	-0.315	0.306	-0.115



Notes:

00 For a recycling drive, Steven and two of his classmates collected aluminum cans. The table shows the weights in ounces of the cans they collected.

Aluminum Cans Collected

Student	Weight of Cans (ounces)
Kevin	14
Steven	34
Cassie	42

Which is closest to the total number of pounds of cans collected by Steven and his two classmates?

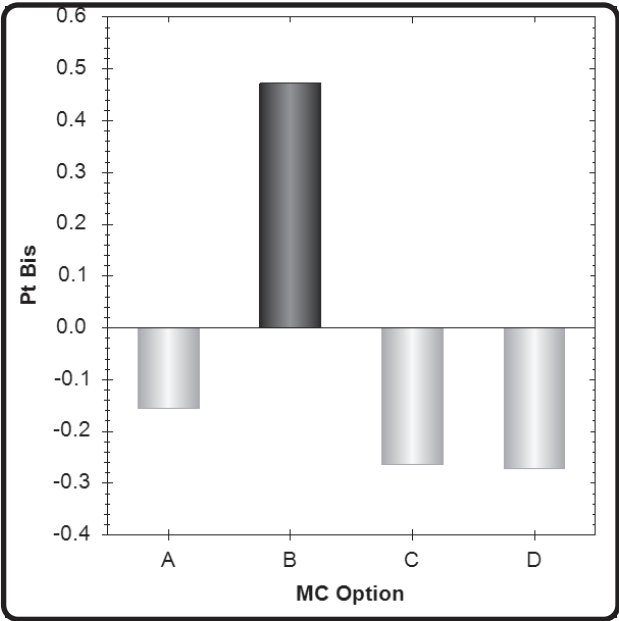
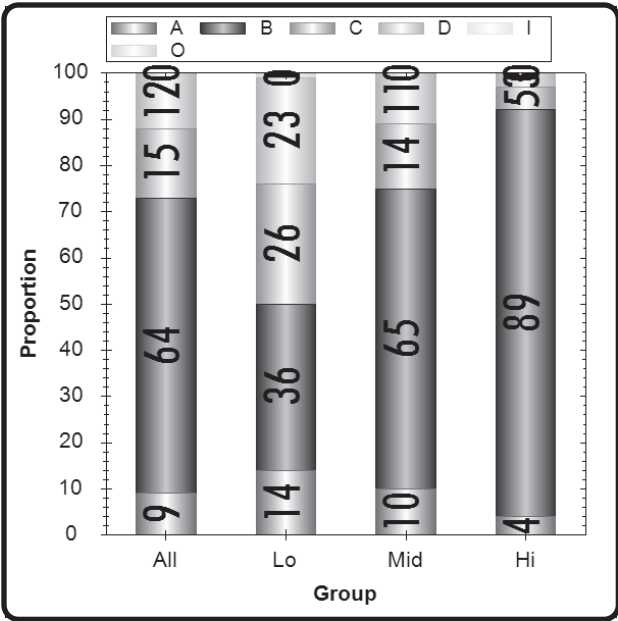
- (A) 2.10
- (B) 5.60
- (C) 11.25
- (D) 15.00

Grade 6	Math	CID 3337213
Item # 23	OP11	6M.1.b

Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	B	6375	0.641	0.472

	A	B	C	D	Inv	Omit
All	9	64	15	12	0	0
Low Scorers	14	36	26	23	0	1
Middle Scorers	10	65	14	11	0	0
High Scorers	4	89	5	3	0	0

A	B	C	D
-0.155	0.472	-0.264	-0.272



Notes:

3337469

00 Neil raked 20 piles of leaves in 5 days. He raked the same number of piles each day. Which equation could be used to determine n , the number of piles of leaves Neil raked each day?

Ⓐ $n = 20 + 5$

Ⓑ $n = 20 \div 5$

Ⓒ $n = 5 \times 20$

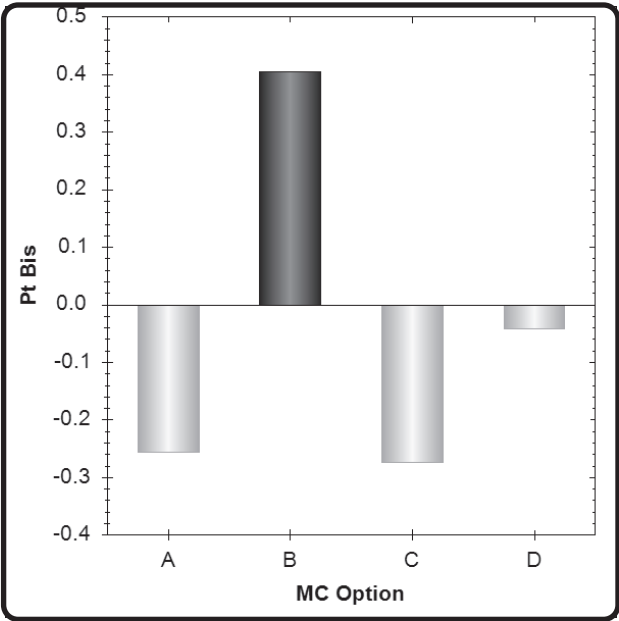
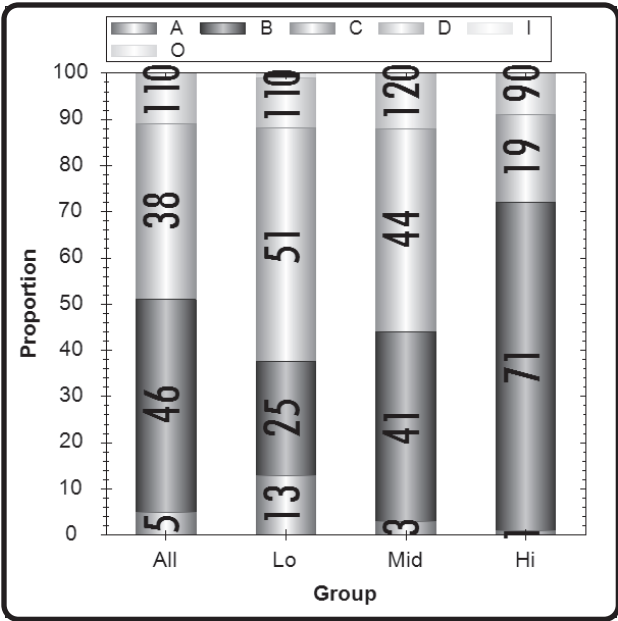
Ⓓ $n = 5 \div 20$

Grade 6 Item # 13	Math OP11	CID 3337469 6A.2.a
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Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	B	6375	0.466	0.406

	A	B	C	D	Inv	Omit
All	5	46	38	11	0	0
Low Scorers	13	25	51	11	0	1
Middle Scorers	3	41	44	12	0	0
High Scorers	1	71	19	9	0	0

MC Item Option Discriminations			
A	B	C	D
-0.257	0.406	-0.275	-0.042



Notes:

00 In the table below, Erica listed the number of calories in one chocolate-chip cookie for five different brands.

Calories in Chocolate-Chip Cookies

Brand	Number of Calories in One Cookie
Cookie-Ohs!	60
Ci-Ci's Cookies	75
Baker's Cookies	60
Tom's Cookies	75
Tasty Cookies	80

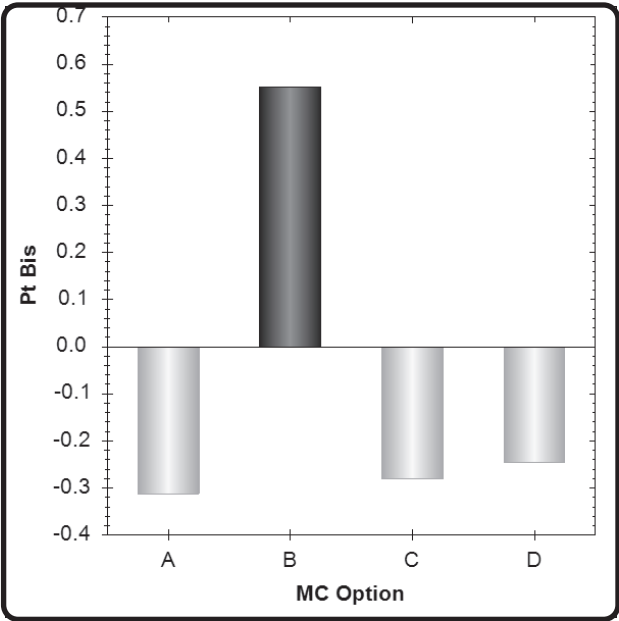
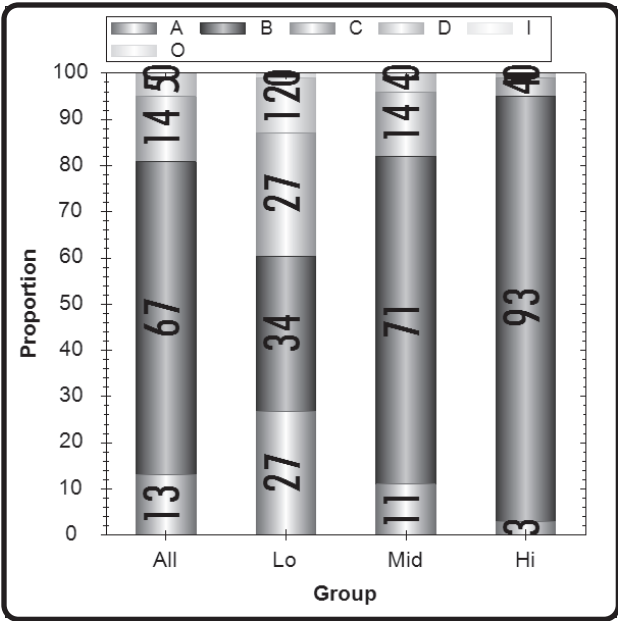
For the brands listed, what is the mean number of calories in one chocolate-chip cookie?

- (A) 60
- (B) 70
- (C) 75
- (D) 80

Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	B	6375	0.670	0.552

	A	B	C	D	Inv	Omit
All	13	67	14	5	0	0
Low Scorers	27	34	27	12	0	1
Middle Scorers	11	71	14	4	0	0
High Scorers	3	93	4	1	0	0

MC Item Option Discriminations			
A	B	C	D
-0.312	0.552	-0.281	-0.245



Notes:

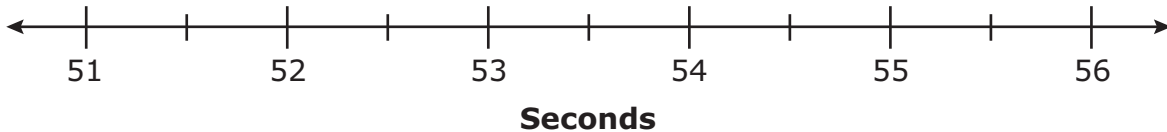
3415258

- 00** The names, years, and winning times of five U.S. champion swimmers in the men's 100-meter butterfly stroke are listed in the table below.

U.S. Champion Swimmers

Name	Year	Winning Time (seconds)
Douglas Russell	1968	55.90
Mark Spitz	1972	54.27
Matt Vogel	1976	54.35
Pablo Morales	1992	53.32
Michael Phelps	2004	51.25

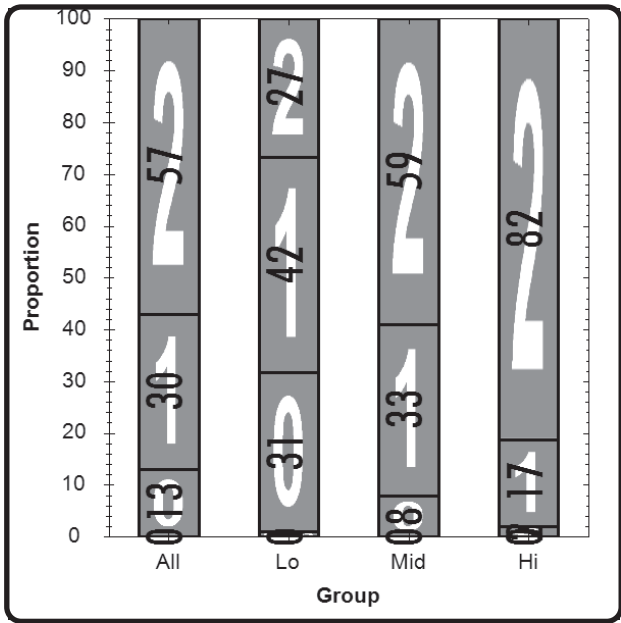
On the number line below, plot the winning times of the five swimmers listed in the table. Label each point with the initial of the swimmer's last name: R, S, V, M, and P.



Grade 6 Item # 12	Math OP11	CID 3415258 6N.2.a
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Type Short Response	Max Points 2	N Count 6375	Item Mean 1.433	Discrimination 0.531
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	0	1	2	Inv	Omit
All	13	30	57	0	0
Low Scorers	31	42	27	0	1
Middle Scorers	8	33	59	0	0
High Scorers	2	17	82	0	0



Notes:

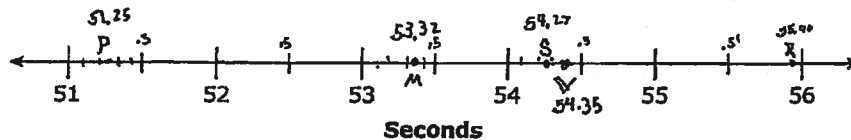


- 1 The names, years, and winning times of five U.S. champion swimmers in the men's 100-meter butterfly stroke are listed in the table below.

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Score point 2 This response is complete and accurate and is based on appropriate methods for representing and ordering whole numbers and decimals. The student marks the number line to reflect exact times, then plots and labels all five winning times correctly on the number line. All points in order and correctly plotted show evidence of sound reasoning and support the solution.

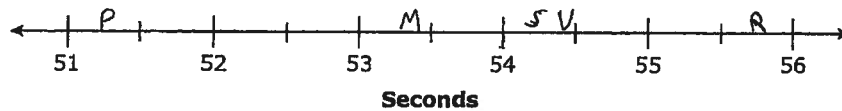


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Score point 1 This response is incomplete. The student labels the number line without marking any plot points to show exact times. All labels are close to the correct placement and are in the correct order; this shows evidence of sound reasoning, but is inadequate to support an accurate solution without actual plot points.

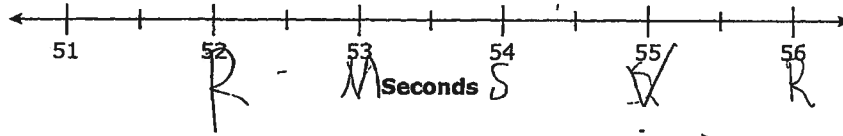


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Score point 0 No plot points are marked on the number line, and none of the labels are close to correct placement. The swimmers are mostly in order (P is unclear), but the majority of the response is incorrect without actual marked plots or clear labelling. This shows little understanding of how to successfully address the task of representing whole numbers and decimals on a number line.

