PAWS
Mathematics
Grade 8

Released Items
With Data

2009

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3508994

René cut 5 pieces of fabric of the same length from a roll of fabric to make curtains.

- **Each piece of fabric was $8\frac{1}{4}$ feet in length.**
- **The roll of fabric was 45 feet in length.**

What is the amount of fabric remaining on the roll?

A. $3\frac{1}{5}$ ft

B. $3\frac{3}{4}$ ft

C. $4\frac{1}{5}$ ft

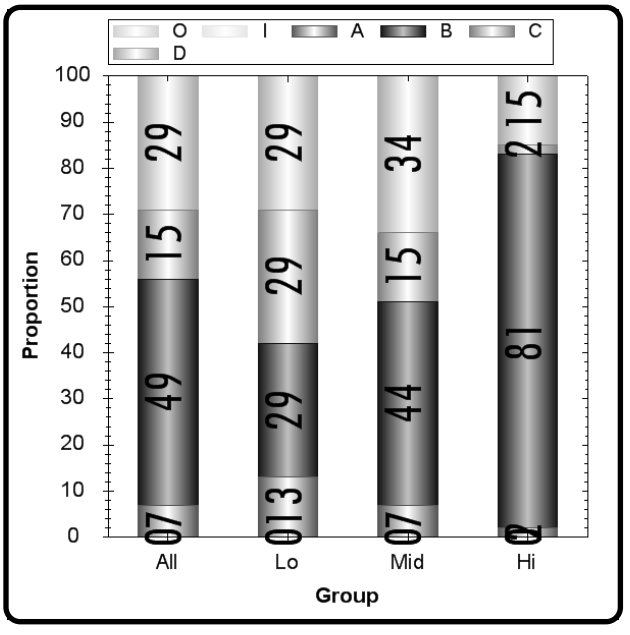
D. $4\frac{3}{4}$ ft

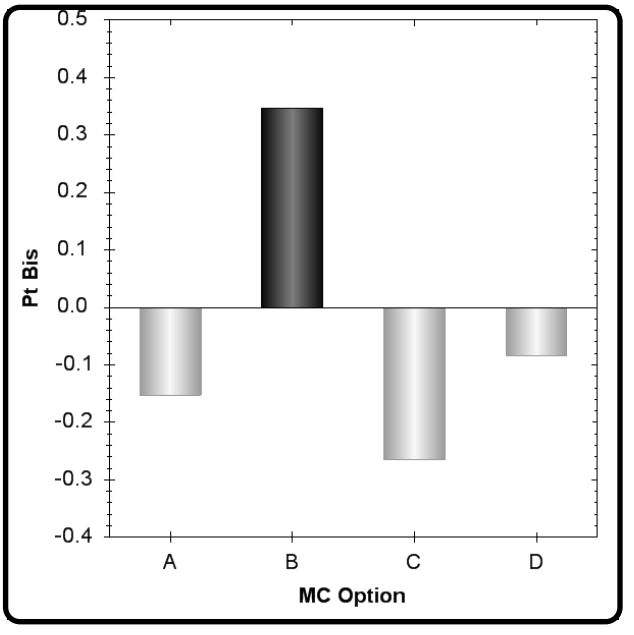
Grade 8	Math	CID 3508994
Item # 7		Administration OP09
	8N.3.a	

Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	B	6215	0.492	0.347

	A	B	C	D	Omit	Invalid
All	7	49	15	29	0	0
Low Scorers	13	29	29	29	0	0
Middle Scorers	7	44	15	34	0	0
High Scorers	2	81	2	15	0	0

MC Item Option Discriminations			
A	B	C	D
-0.153	0.347	-0.265	-0.084





Notes:

An agricultural lab uses the following equation to predict *h*, the height of a plant in inches after *w* weeks of experimental growth.

$$h = 8w$$

What will be the height of the plant in inches after 5 weeks of experimental growth?

A. 40 in.

B. 13 in.

C. $\frac{8}{5}$ in.

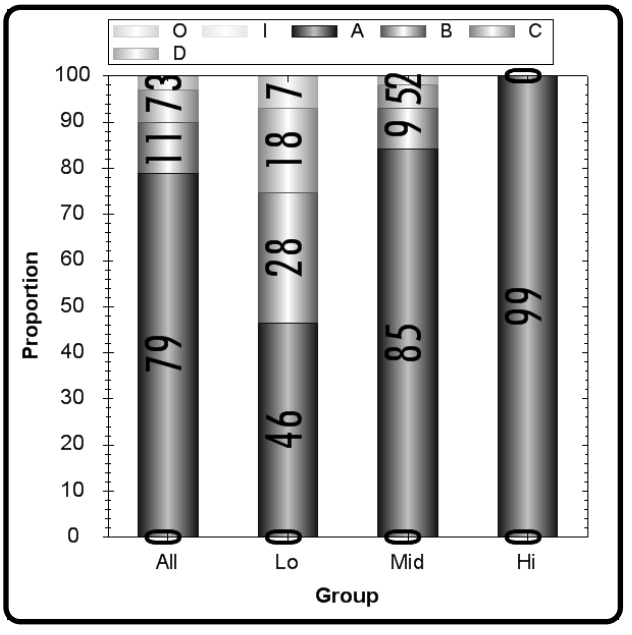
D. $\frac{5}{8}$ in.

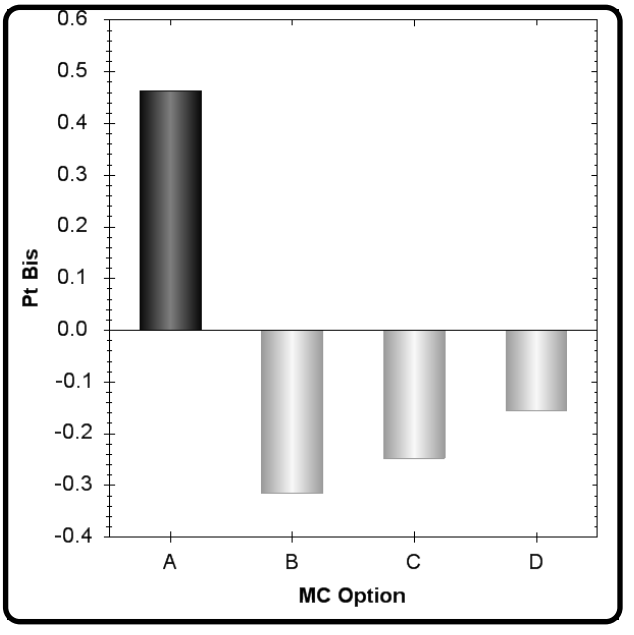
Grade 8	Math	CID 3341655
Item # 21		Administration OP09
	8A.1.b	

Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	A	6215	0.794	0.463

	A	B	C	D	Omit	Invalid
All	79	11	7	3	0	0
Low Scorers	46	28	18	7	0	0
Middle Scorers	85	9	5	2	0	0
High Scorers	99	0	0	0	0	0

MC Item Option Discriminations			
A	B	C	D
0.463	-0.315	-0.247	-0.156





Notes:

Female students may perform better on this item as compared to Male students. (B)

Jason drew an angle that measured 65°. What would be the measure of its complementary angle?

A. 115°

B. 105°

C. 35°

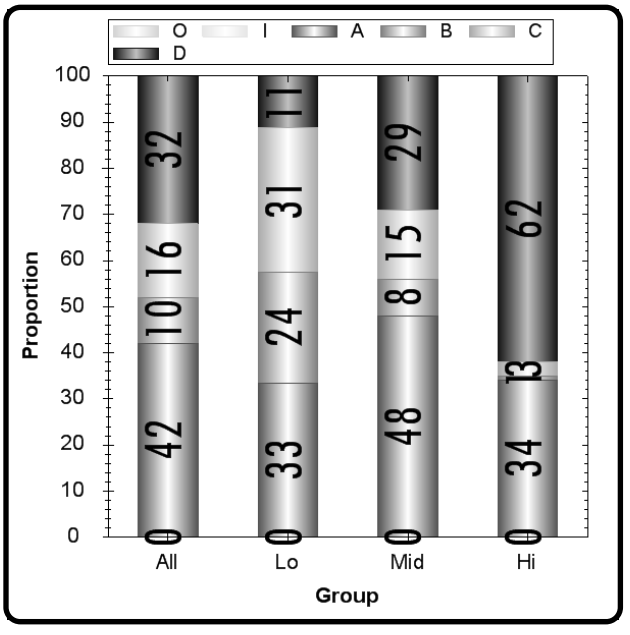
D. 25°

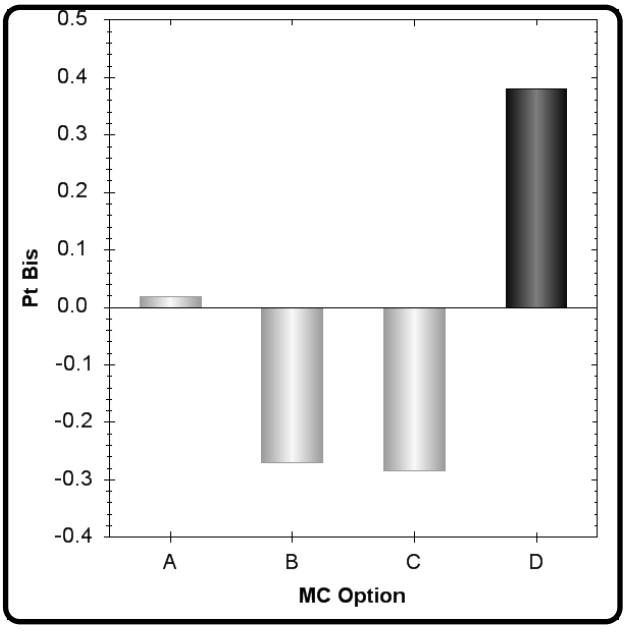
Grade 8	Math	CID 3376931
Item # 20		Administration OP09
	8M.1.a	

Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	D	6215	0.323	0.380

	A	B	C	D	Omit	Invalid
All	42	10	16	32	0	0
Low Scorers	33	24	31	11	0	0
Middle Scorers	48	8	15	29	0	0
High Scorers	34	1	3	62	0	0

MC Item Option Discriminations			
A	B	C	D
0.019	-0.271	-0.284	0.380





Notes:

Option A is more popular than key D. Check option discrimination.

Option A has positive discrimination. Check option for ambiguity/correctness.

3510276

Theo spun the arrow of a spinner 20 times during a math game. The spinner is divided into 4 sections of equal size, each labeled blue, green, red or yellow. The table shows the number of times the arrow landed on each section.

Theo's Spinner Data

Section	Number
Blue	6
Green	2
Red	3
Yellow	9

Based on theoretical probability, which statement best describes the outcomes of the arrow landing on a yellow section?

A. It landed 4 more times than expected.

B. It landed 5 more times than expected.

C. It landed 4 less times than expected.

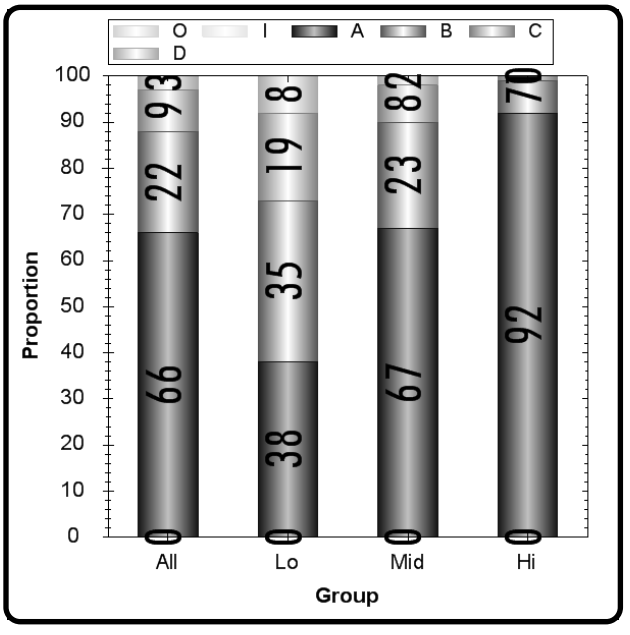
D. It landed 5 less times than expected.

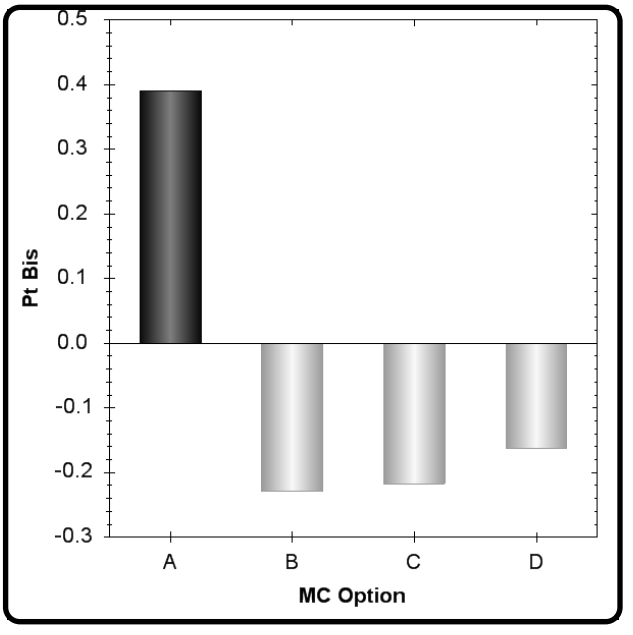
Grade 8	Math	CID 3510276
Item # 40		Administration OP09
	8D.2.a	

Type	Max Points	Correct Answer	N Count	Item Mean	Discrimination
Multiple Choice	1	A	6215	0.661	0.391

	A	B	C	D	Omit	Invalid
All	66	22	9	3	0	0
Low Scorers	38	35	19	8	0	0
Middle Scorers	67	23	8	2	0	0
High Scorers	92	7	1	0	0	0

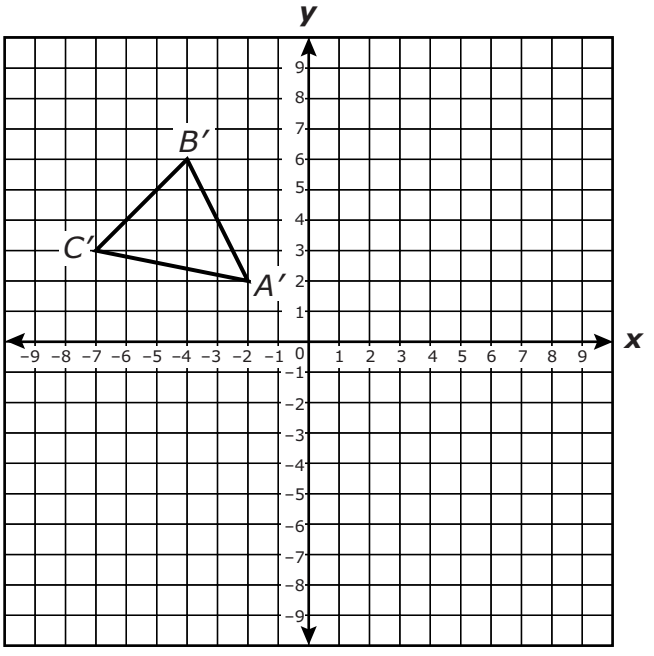
MC Item Option Discriminations			
A	B	C	D
0.391	-0.229	-0.217	-0.163





Notes:

The grid below shows triangle *A′B′C′*, the translated image of triangle *ABC*.



Part A. **Triangle *ABC* was in the fourth quadrant before it was translated to form triangle *A′B′C′*. Point *B* was located at (4, −2). What were the coordinates of the other two vertices of triangle *ABC* before the translation? Write your answers in the spaces below. You may use the coordinate grid to show or explain how you got your answer.**

Coordinates of *A*: _____

Coordinates of *C*: _____

_____

_____

_____

Part B. **Using your coordinates from Part A, describe the translation that could have been used on triangle *ABC* to obtain triangle *A'B'C'*. Write your answer in the space provided. Show or explain how you got your answer.**

Translation: _____

_____

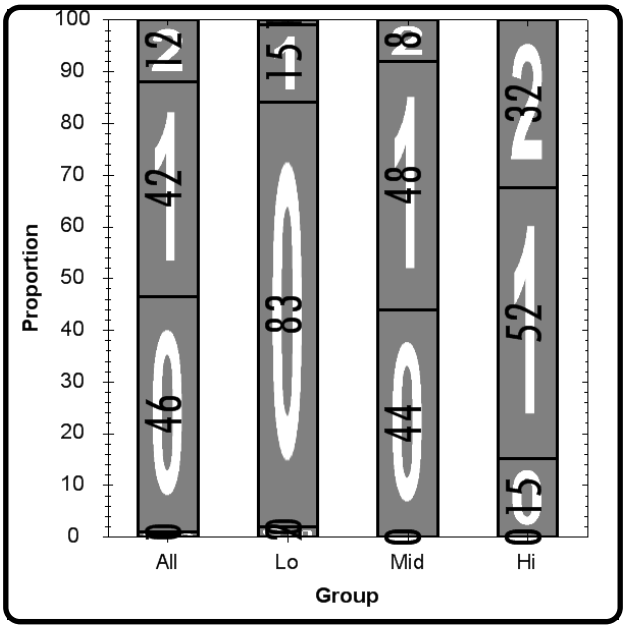
_____

_____

Grade 8	Math	CID 3453593
Item # 51		Administration OP09
	8G.3.a	

Type	Max Points	N Count	Item Mean	Discrimination
Short Answer	2	6215	0.651	0.508

	0	1	2	Omit	Invalid
All	46	42	12	1	0
Low Scorers	83	15	1	2	0
Middle Scorers	44	48	8	0	0
High Scorers	15	52	32	0	0



Notes:

521952 1 2 3 4 5 A B C D E Printed in the USA ISD0080