Message from Donna Watts, Coordinator for Mathematics

- The public release items in each grade DO NOT represent the blueprint of the test. You are seeing real items but only a subset of what a student would actually experience on the test itself.
- The PDF may LOOK like an actual test, however, it only contains LESS THAN 20 ITEMS in any grade, which is SIGNIFICANTLY LESS than the number of items a student actually answers to determine his/her score.
- While these items were used with students, remember objectives can and WILL be assessed in a variety of ways. With this released item, you are seeing only ONE way to assess that objective.
- We are planning to add answers, student responses and annotations of student responses along with a link between the objective and the item. As that information is reviewed, it will also be uploaded.

Continue to page 2 MSA Public Release Items →

MSA

MARYLAND SCHOOL ASSESSMENT

MATHEMATICS PUBLIC RELEASE

Release Date: March 2009

GRADE 7

PEARSON

MD09-PR-A1-A

For selected-response questions, you may use the space inside the boxed area or scratch paper for notes and calculations. Be sure to fill in the bubble with your answer.

For constructed-response questions, you may use the space inside the boxed area or scratch paper for notes and calculations. Write your answers on the lines provided. You do not need to use the entire answer space. If you use scratch paper, remember: only what is written inside the boxed area will be scored.

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1

Valeri earned $12.50 per hour at her summer job.

If she earned $375 last week, which equation can be used to determine the number of hours (h) Valeri worked?

Ⓐ $12.50 + h = 375$

Ⓑ $12.50h = 375$

Ⓒ $12.50(375) = h$

Ⓓ $12.50 \div 375 = h$

2 Which table shows a decreasing linear relationship?

Ⓐ

x	*y*
4	5
7	7
10	9
13	11

Ⓒ

x	*y*
4	124
8	267
12	407
16	551

Ⓑ

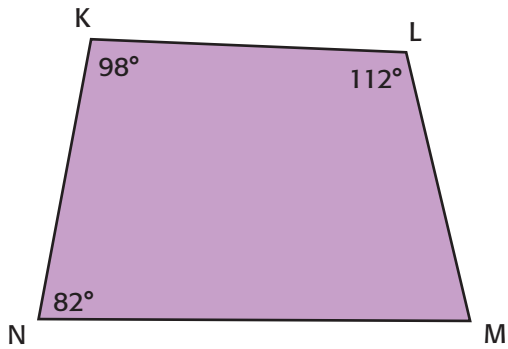
x	*y*
4	56
5	56
6	56
7	56

Ⓓ

x	*y*
14	58
24	47
34	36
44	25

3

Look at quadrilateral KLMN.



Note: The figure is not drawn to scale.

Step A

What is the measure of ∠M?

_____ degrees

GO ON

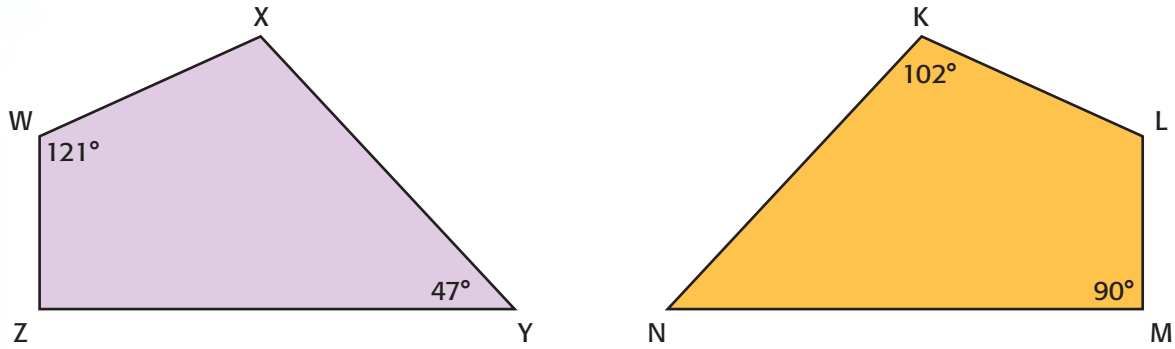
Step B

- Use what you know about the angle measures of a quadrilateral to justify why the measure you determined for ∠M is correct. Use words, numbers, and/or symbols in your justification.

- A new quadrilateral KLMN is drawn so that the measures of ∠K and ∠L do not change, but ∠M and ∠N are now congruent. Use what you know about the angles of a quadrilateral to explain how this change affects the measure of ∠M. Use words, numbers, and/or symbols in your explanation.

4

Quadrilateral WXYZ is congruent to quadrilateral LKNM.



Note: The figure is not drawn to scale.

What is the measure of ∠L?

Ⓐ 47°

Ⓑ 90°

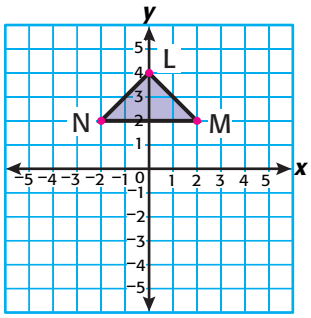
Ⓒ 102°

Ⓓ 121°

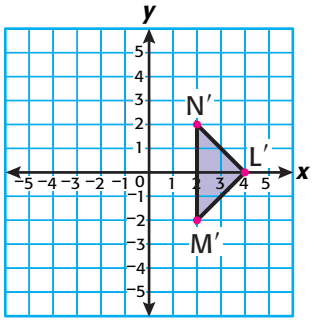
GO ON

5

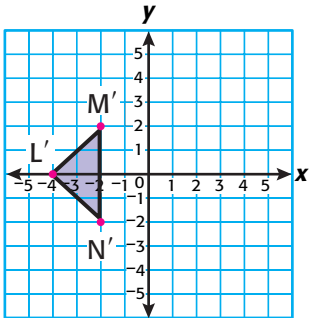
Look at ΔLMN on the coordinate plane.



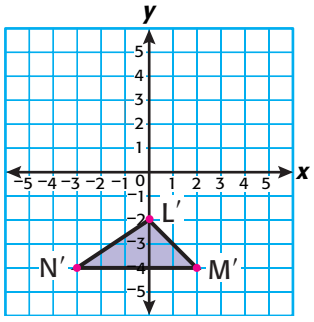
Which coordinate plane shows ΔLMN after a 90° counterclockwise rotation about the origin?



Ⓐ



Ⓒ



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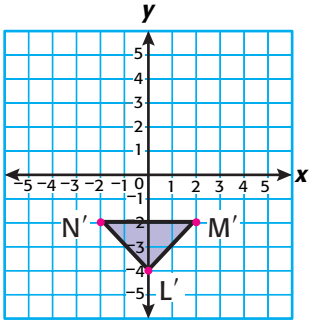

Ⓓ

GO ON

6

This table lists the ages of 12 store owners.

AGES OF STORE OWNERS

Toy Store	Clothing Store
28, 29, 34, 53, 59, 59	32, 35, 39, 51, 62, 62

Which stem-and-leaf plot correctly displays the data?

AGES OF STORE OWNERS

Toy Store		Clothing Store
	2	8 9
9 5 2	3	4
	4	
1	5	3 9 9
2 2	6	

KEY: 9 | 3 = 39 KEY: 3 | 4 = 34

Ⓐ

AGES OF STORE OWNERS

Toy Store		Clothing Store
9 8	2	
4	3	2 5 9
	4	
9 9 3	5	1
	6	2 2

KEY: 4 | 3 = 34 KEY: 3 | 2 = 32

Ⓒ

AGES OF STORE OWNERS

Toy Store		Clothing Store
9 8	2	
4	3	2 5 9
9 9 3	5	1
	6	2 2

KEY: 3 | 5 = 53 KEY: 5 | 1 = 51

Ⓑ

AGES OF STORE OWNERS

Toy Store		Clothing Store
9 8	2	
4	3	2 5 9
	4	
9 3	5	1
	6	2

KEY: 4 | 3 = 34 KEY: 6 | 2 = 62

Ⓓ

GO ON

7

Students in a marching band collected money for new uniforms. This table shows the amount of money they collected last week.

COLLECTIONS

Day	Amount
Monday	$25.34
Tuesday	$10.45
Wednesday	$39.77
Thursday	$78.35
Friday	$63.29
Saturday	$44.26
Sunday	$57.18

Step A

What is the mean amount of money the students collected?

$ _____

Step B

The amounts for Saturday and Sunday were recorded incorrectly. Saturday should have been $34.24, and Sunday should have been $75.18. Use what you know about determining the mean to explain how these changes will affect your answer in Step A. Use words, data, and/or symbols in your explanation.

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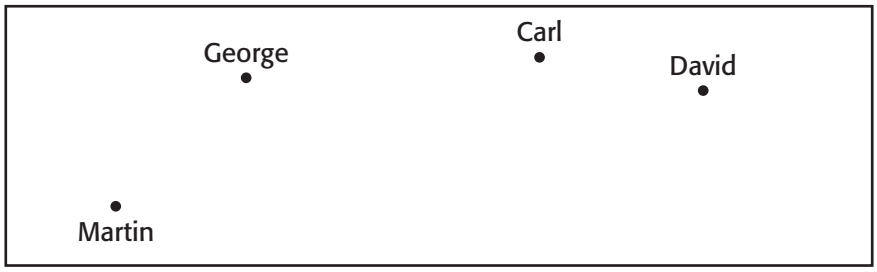
8

Martin, George, Carl, and David are in a school play. This scale drawing shows where each student stands at the beginning of the play.



SCALE
$\frac{1}{2}$ inch = 1 yard

What is the distance, in yards, between Martin and David?

Ⓐ 2 yards

Ⓑ 4 yards

Ⓒ 6 yards

Ⓓ 8 yards

GO ON

9

Joshua went to a restaurant that offers 5 types of pasta and 3 types of sauce.

How many different choices of 1 pasta and 1 sauce can Joshua order?

Ⓐ 8

Ⓑ 10

Ⓒ 12

Ⓓ 15

10

In a survey, Scott asked 50 people if they voted for the current mayor. He recorded the results in this table.

VOTES FOR MAYOR

Yes	No	Private Decision
22	20	8

Based on the survey, what is the probability the next person will say "No"?

Ⓐ 5%

Ⓑ 20%

Ⓒ 40%

Ⓓ 67%

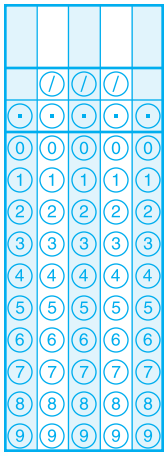
GO ON ▶

11

A football player lost 11 yards on a run. He gained 87 yards on the next run. This expression can be used to determine the total change in the number of yards.

$$-11 + 87$$

What is the total change in the number of yards?



12

At an afterschool tutoring program, the ratio of teachers to students is 18 to 100.

Which ratio is equivalent to the ratio of teachers to students?

Ⓐ 1 to 18

Ⓑ 9 to 50

Ⓒ 4 to 25

Ⓓ 6 to 20

STOP