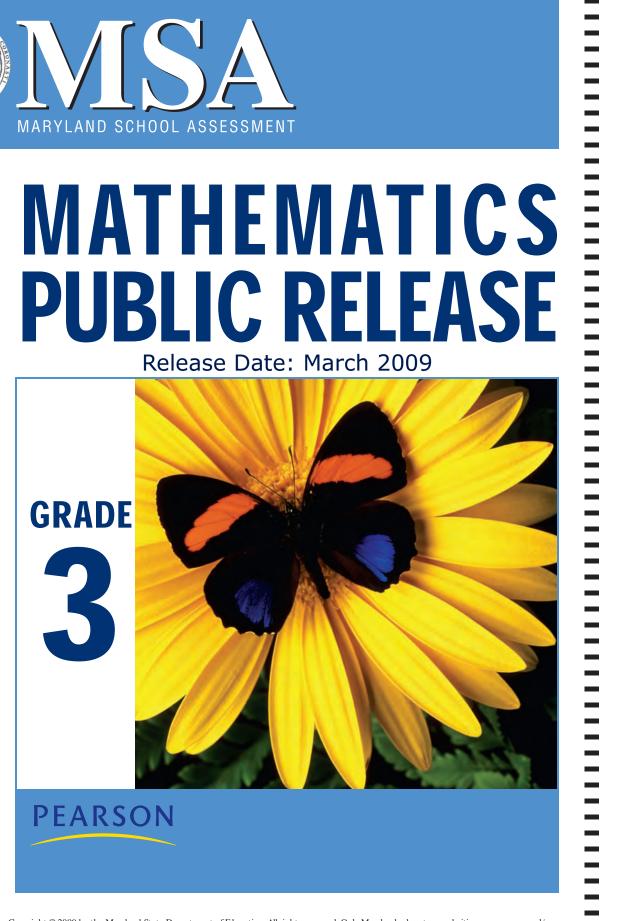


# Message from Donna Watts, Coordinator for Mathematics

- ➤ 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  $\rightarrow$ 







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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.

Do not write outside the boxed area for any question.



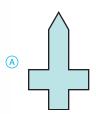


What number is shown by point R on this number line?

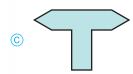


- A 116
- **B** 126
- © 136
- D 146

Which figure is made of exactly two squares and two triangles?









**GO ON**▶



Jackie drew this pentagon as the front of a house.



How many lines of symmetry could Jackie draw on this pentagon?

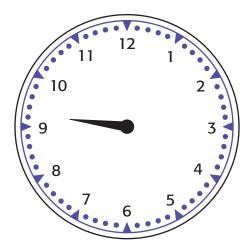
- A 0
- B 1
- © 2
- D 5

GO ON ▶

A class begins at exactly 9:12 A.M. The hour hand on the clock below has already been drawn for you.

# Step A

On the clock, draw the minute hand to show the time the class begins.



# Step B

Explain why the minute hand you drew on the clock is correct. Use what you know about clocks and how to tell time in your explanation. Use words and/or numbers in your explanation.

U	$\mathbf{C}$	IN	

Jason has 9 square tiles in a bag. The square tiles are the same size. The colors are listed below.

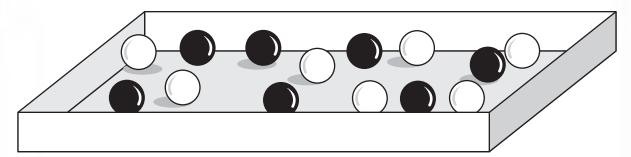
# 3 red 2 blue 4 yellow

Without looking Jason will reach in the bag and pick one square tile.

What is the likelihood Jason will pick a blue square tile?

- (A) most likely
- <sup>®</sup> impossible
- © least likely
- equally likely

Look at this tray of marbles.



Sara closes her eyes and picks one marble.

What is the probability she will pick a black marble?

- (A) less likely
- B more likely
- © equally likely
- impossible





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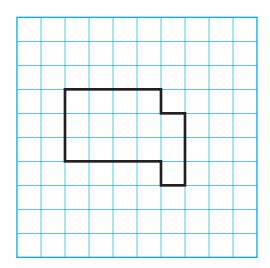
Look at this number sentence.

$$7 + 13 = 6 + 4 + \square$$

What number should go in the box to make the number sentence correct?

- A 10
- **B** 14
- © 16
- D 20

Mike wants to build a fence around his garden. The shape of Mike's garden is shown on the grid.



What is the perimeter, in units, of Mike's garden?

- A 13 units
- **B** 15 units
- © 16 units
- 18 units

This pictograph shows how students spend their recess time.

## **RECESS**

Activity	Number of Students					
Draw	<b>†</b>	<b>†</b>	<b>†</b>	<b>†</b>	<b>†</b>	
Play board games	1	<b>†</b>	1			
Play outside	1	<b>†</b>	1	<b>†</b>	<b>†</b>	1
Read books	<b>†</b>	<b>†</b>				

**KEY**= 2 students

Pedro must change his pictograph to show that a total of 8 students read books during recess.

How many pictures should Pedro add to the last row of his pictograph?

- A 2
- B 4
- © 6
- **D** 8

This table shows the amount of food a 5-month-old puppy needs each day.

## **FOOD EACH DAY**

Weight of Puppy (in pounds)	Cups of Food
20–30	2–3
30–40	3–4
40–60	4–5
60-80	5–6

If a puppy weighs 47 pounds, how many cups of food does the puppy need each day?

- A 2-3 cups
- **■** 3–4 cups
- © 4–5 cups
- 5–6 cups

Three friends collected shells at the beach. These pails show the number of shells each friend collected.







How many shells did the three friends collect all together?

- A 106
- B 124
- © 135
- D 144

Brittany has 15 heart stickers. She put them in 3 equal groups.

# Step A

Make a drawing to show how many heart stickers are in each group.

# Step B

Brittany wants to put her stickers in 5 equal groups instead of 3 equal groups. Explain how this would change your drawing. Use what you know about division in your explanation.

Use words, numbers, and/or symbols in your explanation.



