

# New England Common Assessment Program

## **Student Practice Test Booklet**

# Grade 6

### **Mathematics**

Student Name: \_\_\_\_\_

School Name: \_\_\_\_\_

#### Answer questions 1 through 4 on page 2.



1 Look at this pattern of squares.

Step 1	Step 2	Step 3	Step 4

If the pattern continues, how many squares are needed to make Step 8?

- A. 18
- B. 20
- C. 22
- D. 24

**2** Look at this figure.



What is the area of this figure?

- A. 36 square feet
- B. 68 square feet
- C. 70 square feet
- D. 74 square feet

**3** The table below shows the cups of raisins needed in four different recipes.

Recipe	Cups of Raisins				
Cookies	<u>9</u> 4				
Muffins	<u>15</u> 8				
Bread	$1\frac{3}{4}$				
Trail mix	2 <sup>1</sup> / <sub>8</sub>				

Which recipe uses the greatest number of cups of raisins?

- A. cookies
- B. muffins
- C. bread
- D. trail mix





What is the median price of the sneakers sold at this shoe store?

- A. \$30
- B. \$40
- C. \$50
- D. \$60



#### Answer question 5 on page 2.

5 Joel read *n* books during the summer. Michael read 5 more than 3 times the number of books Joel read.

Use n to write an expression for the number of books Michael read during the summer.

#### Answer question 6 on page 2.

6 In an orchard there are only Cortland apple trees and Macintosh apple trees. There are a total of 168 apple trees.

- In the orchard there are 6 rows of Cortland apple trees and 8 rows of Macintosh apple trees.
- Each row in the orchard contains the same number of apple trees.

What is the total number of **Cortland apple trees** in the orchard? Show your work or explain how you know.

#### Answer question 7 on page 2.

**1** Look at this parking meter.



When the meter is at 0 minutes, what is the **least** amount of money Mr. Blaine will have to pay to park at the meter for 70 minutes? Show your work or explain how you know.



### Mathematics—Session 2 (Calculator)

#### Answer questions 8 through 11 on page 3.

8 Raven wrote a number pattern on the board, as shown below.



The first two numbers in Raven's pattern got erased. What were the first two numbers in Raven's pattern?

- A. 50, 52
- B. 50, 42
- C. 38, 36
- D. 34, 36

9 Which model is shaded gray to represent  $\frac{2}{5}$  of the model?







- A pizzeria uses the equation  $c = 2 \cdot t + 6$  to find the cost, c, in dollars of a pizza with t toppings. How many toppings are on a pizza that costs 14 dollars?
  - A. 10
  - B. 6
  - C. 4
  - D. 1



**1** During a class activity, Kyle spun the arrow shown below many times.



The arrow landed on blue 12 times. Which is **most likely** the number of times Kyle spun the arrow?

- A. 25
- B. 50
- C. 100
- D. 400



#### Answer question 12 on page 3.



12 Mr. Levy needs 70 buttons to finish making the costumes for a school play. Buttons are sold in packages of 4. What is the fewest number of packages Mr. Levy needs to buy?



#### Answer question 13 on page 3.

**13** Sabrina drew the right triangle shown below.



- a. What is the area of Sabrina's triangle? Show your work or explain how you know.
- b. Luke wants to draw a right triangle with an area of 20 square units. He first drew the base of his triangle, as shown below.

									1 unit ⊢—⊣			
•	•	•	•	•	•	•	•	•	•	• -	1	unit
•	•	•	•	•	•	•	•	•	•	• -	L '	unn
•	•	•	•	•	•	•	•	•	•	•		
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•	•	•	•						•	•		
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What should be the height of Luke's triangle? Show your work or explain how you know.

