



**NEW ENGLAND
COMMON ASSESSMENT PROGRAM**

**Released Items
2013**

**Grade 5
Mathematics**

Mathematics



Items with this symbol were selected from Session One—no calculators or other mathematics tools allowed.

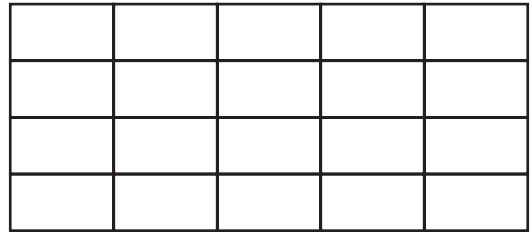


1 What number is 15 tens less than 17,500?

- A. 2,500
- B. 16,000
- C. 17,350
- D. 17,485



2 This drawing represents a chocolate bar that Lindsay, Dan, and Sean shared.



- Lindsay ate $\frac{1}{5}$ of the chocolate bar.
- Dan ate $\frac{3}{20}$ of the chocolate bar.
- Sean ate $\frac{5}{10}$ of the chocolate bar.

Which list shows the students in order from who ate the least to who ate the most of the chocolate bar?

- A. Dan, Lindsay, Sean
- B. Dan, Sean, Lindsay
- C. Lindsay, Sean, Dan
- D. Lindsay, Dan, Sean



3 Mr. Taylor's garden has only pepper plants. His garden has 5 rows with 12 plants in each row. There are twice as many red pepper plants as green pepper plants. How many **red** pepper plants are in Mr. Taylor's garden?

- A. 60
- B. 40
- C. 30
- D. 15

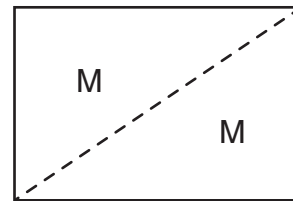
4 Harry gave these clues to describe his mystery shape.

- It has four sides.
- Its opposite sides have the same length.
- Two of its angles are **more than** 90° .

What is Harry's mystery shape?

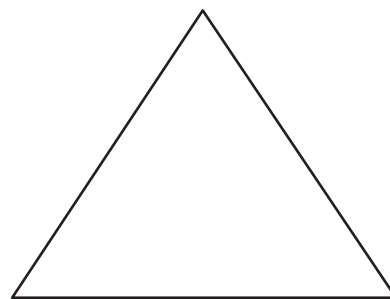
- A. rhombus
- B. hexagon
- C. square
- D. rectangle

5 Juan cut this rectangle into two triangles.

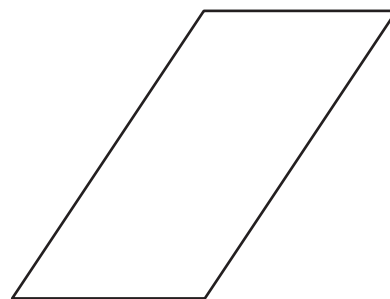


Juan uses the two triangles to make new shapes so that the triangles fit together with no gaps or overlaps. Which shape can Juan **not** make with the two triangles?

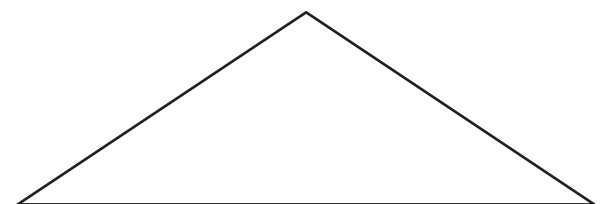
A.



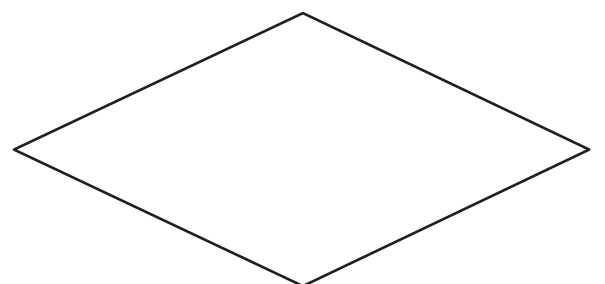
B.



C.



D.



- 6 Look at this pattern.

?, ?, 12, 17, 16, 21, 20, 25, 24

What are the first two numbers in the pattern?

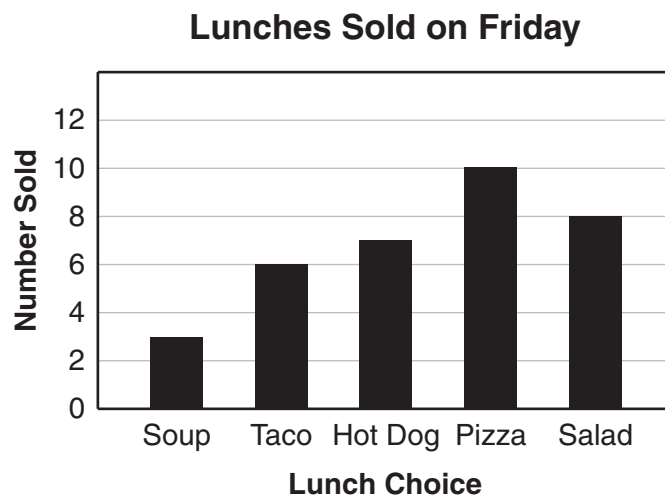
- A. 8, 7
 - B. 8, 13
 - C. 16, 11
 - D. 18, 13
- 7 Mr. Wheeler will burn $12 \times m$ calories if he runs for m minutes. How many calories will Mr. Wheeler burn if he runs for 40 minutes?
- A. 48
 - B. 52
 - C. 160
 - D. 480

- 8 Look at this number sentence.

$$9 + 3 = \square + 5$$

What is the value of \square ?

- A. 3
 - B. 7
 - C. 12
 - D. 17
- 9 This bar graph shows the numbers of different lunches sold on Friday.



The number of pizza lunches sold was the same as the number of which two lunch choices added together?

- A. soup and hot dog
- B. soup and salad
- C. taco and hot dog
- D. taco and salad

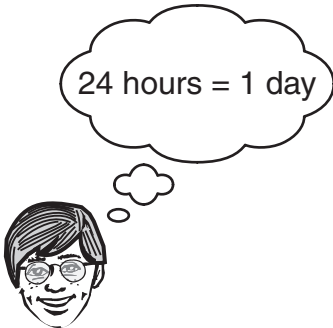
- 10 This table shows the number of museum tickets sold each day for five days last week.

Museum Tickets

Day	Number of Tickets Sold
Monday	138
Tuesday	280
Wednesday	547
Thursday	690
Friday	279

What is the range of the number of tickets sold on the five days?

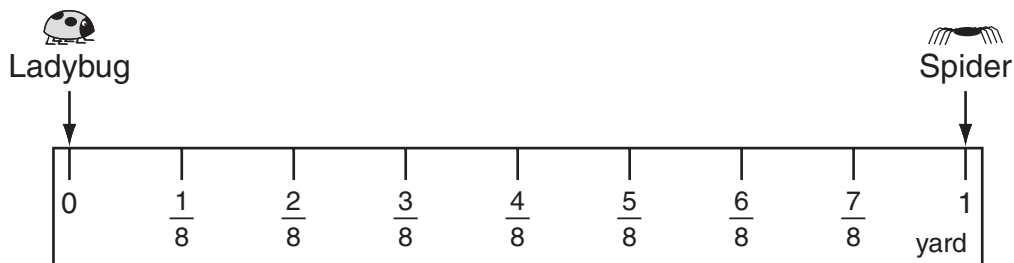
- A. 552
 - B. 547
 - C. 280
 - D. 141
- 11 Isaac will leave to visit a friend in 120 hours. How long, in days, is 120 hours?



- 12 Each stool in an art room has 3 legs. Write an expression that represents the total number of legs on n stools. Be sure to use n in your expression.



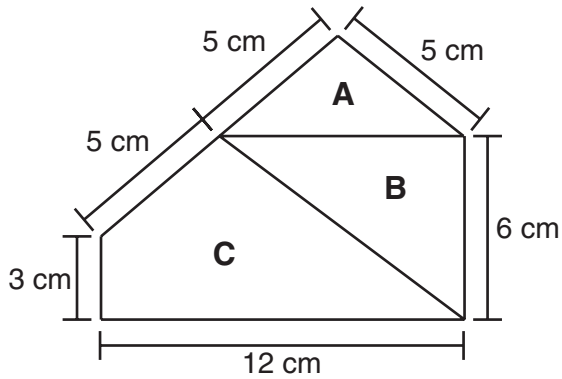
- 13 This picture shows a ladybug standing on one end of a yardstick and a spider standing on the other end.



The ladybug and the spider each walk $\frac{3}{8}$ of a yard toward the center of the yardstick and then stop. What is the distance between the ladybug and the spider when they stop? Show your work or explain how you know.



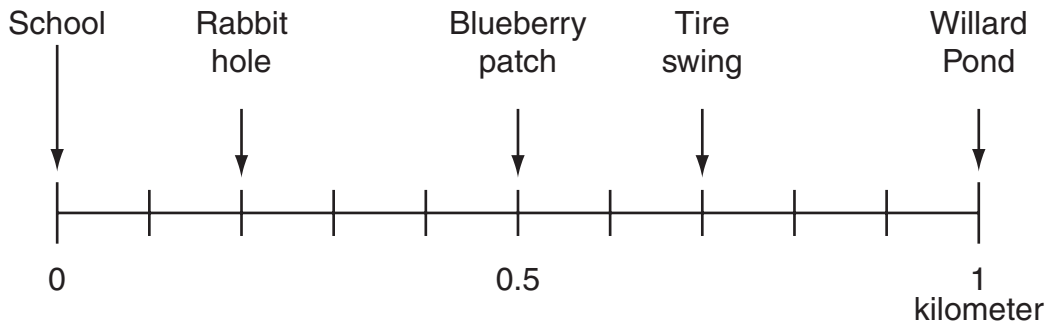
- 14 The figure below is not drawn to scale.



Shape A has a perimeter of 18 centimeters. Shape C has a perimeter of 30 centimeters. What is the perimeter, in centimeters, of Shape B? Show your work or explain how you know.



- 15 This number line shows different places that Evan and Natalie can visit along a 1-kilometer trail from the school to Willard Pond.

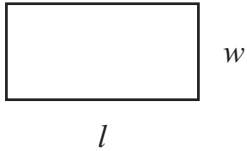


- What is the distance from the rabbit hole to the tire swing?
- Evan walked from the school to the tire swing and then from the tire swing to the blueberry patch. What is the total distance Evan walked? Show your work or explain how you know.
- Natalie walked a total distance of 0.8 kilometer. She started at the school and ended at the rabbit hole. What other place did Natalie visit? Show your work or explain how you know.

New England Common Assessment Program Mathematics Reference Sheet – Grade 5

Use the information below as needed to answer questions on the mathematics test.

Rectangle



$$\begin{aligned} \text{Area} &= \text{length} \cdot \text{width} \\ &= l \cdot w \end{aligned}$$

Median: The median of a data set is the middle value or average of the two middle values when the values are arranged in numerical order.

Mode: The mode of a data set is the value that occurs most often.

Mathematics Tool Kit – Grade 5

Use the shapes to answer questions on the mathematics test.

