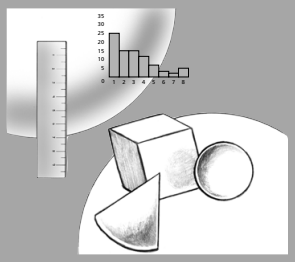
Wisconsin Knowledge and Concepts Examinations
Criterion-Referenced Test

Released Item Book

Mathematics



Grade

6

1 Look at the equation below.

$$72 \div \square - 3 = 6$$

What value belongs in the box?

Ⓐ 8

Ⓑ 9

Ⓒ 12

Ⓓ 24

2 Which of these is equal to 4,035?

Ⓐ 400 + 30 + 5

Ⓑ 4,000 + 30 + 5

Ⓒ 4,000 + 300 + 5

Ⓓ 4,000 + 300 + 50

3 $(6 + 3) \times 2 =$

Ⓐ 11

Ⓑ 12

Ⓒ 18

Ⓓ 36

4 Cameron baby-sits his brother 4 hours every Saturday. If Cameron baby-sits his brother on 12 different Saturdays, how many total hours does he baby-sit?

Ⓐ 3 hours

Ⓑ 16 hours

Ⓒ 46 hours

Ⓓ 48 hours

5
$$\begin{array}{r} 493 \\ -\ 326 \\ \hline \end{array}$$

Ⓐ 163

Ⓑ 167

Ⓒ 173

Ⓓ 177

STOP

6 Look at the equation below.

$$4 \times (\square + 2) = 4 \times 12$$

What is the value of the missing number?

Ⓐ 3

Ⓑ 6

Ⓒ 10

Ⓓ 12

7 Look at the pattern below.

1, 5, 9, 13, . . .

What is the eighth number in this pattern?

Ⓐ 17

Ⓑ 23

Ⓒ 29

Ⓓ 31

8 A tree is 66 inches in height. What is the height of the tree in feet?

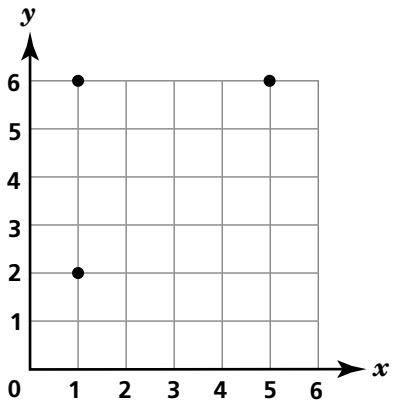
Ⓐ $5\frac{1}{2}$ feet

Ⓑ $5\frac{3}{4}$ feet

Ⓒ $6\frac{1}{4}$ feet

Ⓓ $6\frac{1}{2}$ feet

9 Look at the grid below. The location of three corners of a square are shown.



Which ordered pair represents the fourth point of the square?

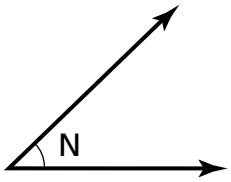
Ⓐ (2, 5)

Ⓑ (5, 2)

Ⓒ (4, 0)

Ⓓ (0, 4)

10 Look at angle N shown below.



Which of these best describes angle N?

Ⓐ right

Ⓑ acute

Ⓒ obtuse

Ⓓ scalene

Go On

11 Geoffrey had a 10-dollar bill. He bought three ice cream cones. Ice cream cones cost $1.78 each, including tax.

Step A

How much change did Geoffrey receive?

Answer: $ _____

Step B

Use what you know about money/decimals to explain how you determined the amount of change Geoffrey received. Use words and/or numbers in your explanation.

_____

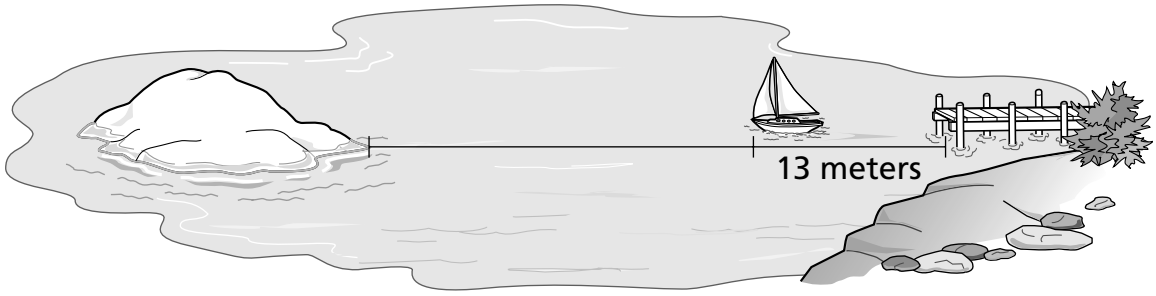
_____

_____

_____

_____

12 The boat below is 13 meters away from the dock.



About how many more meters does the boat need to travel to reach the island?

Ⓐ 13 meters

Ⓑ 26 meters

Ⓒ 39 meters

Ⓓ 52 meters

13 Bethany is using a spinner that has 9 equally spaced sections. There are 5 sections that have a star on them. The remaining sections do not have a star on them. When Bethany spins the arrow, what is the probability that it will not land on a star?

Ⓐ $\frac{4}{5}$

Ⓑ $\frac{4}{9}$

Ⓒ $\frac{5}{4}$

Ⓓ $\frac{5}{9}$

Go On

14 Look at the set of numbers below.

0 5 2 3 7 9 2

What is the mode of this set of numbers?

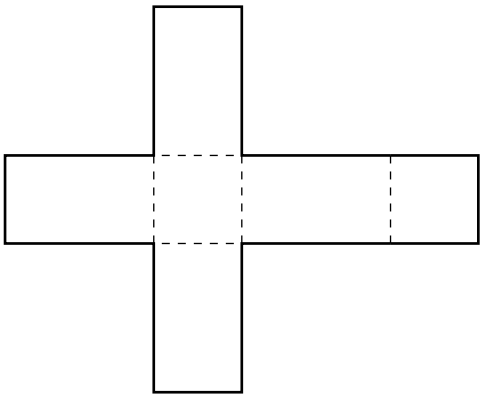
Ⓐ 2

Ⓑ 3

Ⓒ 4

Ⓓ 9

15 Look at the net (flat pattern) below.



If the net (flat pattern) is folded, which geometric shape is created?

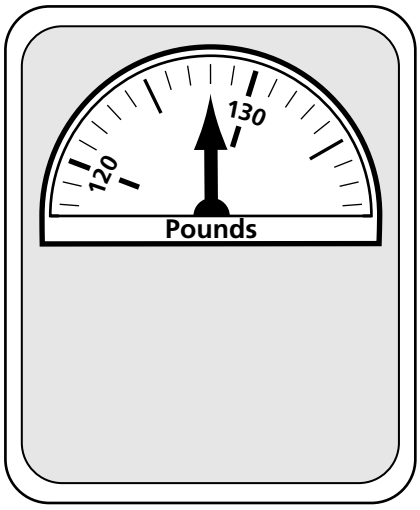
Ⓐ rectangular prism

Ⓑ cube

Ⓒ rectangular pyramid

Ⓓ triangular prism

16 Look at the scale below.



What is the weight shown on the scale?

Ⓐ 123 pounds

Ⓑ 125 pounds

Ⓒ 128 pounds

Ⓓ 130 pounds

17 **Step A**

Design a closed shape that has exactly one line of symmetry. Show the line of symmetry on your shape.

Step B

Explain how your line shows the symmetry of your shape.

18 The table below shows the amount of rain that fell during each month of 2002 in Livermore, California.

Rainfall in Livermore in 2002

Month	Rainfall (in inches)
January	0.72
February	0.62
March	1.65
April	0.16
May	0.68
June	0.00
July	0.00
August	0.00
September	0.00
October	0.00
November	2.65
December	7.01

What was the mean amount of monthly rainfall, rounded to the nearest hundredth of an inch, in Livermore in 2002?

Ⓐ 0.00 inches

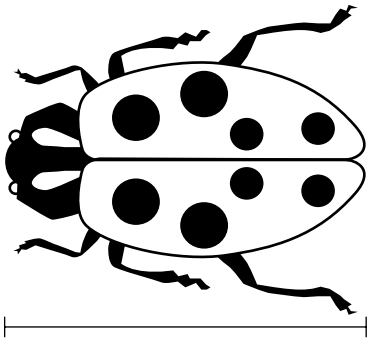
Ⓑ 0.39 inches

Ⓒ 1.12 inches

Ⓓ 1.93 inches

19  Use the centimeter side of your ruler to help you solve this problem.

Look at the picture of the bug below.



What is the length of the bug?

Ⓐ 4.5 centimeters

Ⓑ 4.8 centimeters

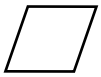
Ⓒ 5.0 centimeters

Ⓓ 5.2 centimeters

20 Look at the pattern of shapes below.

If the pattern continues, what will be the 7th shape?

Ⓐ 

Ⓒ 

Ⓑ 

Ⓓ 

STOP