



**NEW ENGLAND
COMMON ASSESSMENT PROGRAM**

**Student Work Samples
2012**

Grade 4



Mathematics

11 Look at this number sentence.

$$6 + 6 + 6 = \boxed{18}$$

Write a multiplication sentence that means the same as this number sentence.

$$3 \times 6 = 18$$

- 11 Look at this number sentence.

$$6 + 6 + 6 = \square$$

Write a multiplication sentence that means the same as this number sentence.

$$6 \times 3 = 18$$

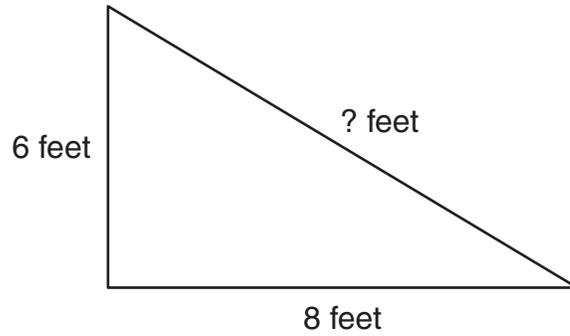
- 11 Look at this number sentence.

$$6 + 6 + 6 = \square$$

Write a multiplication sentence that means the same as this number sentence.

$$6 + 6 + 6 = 18$$

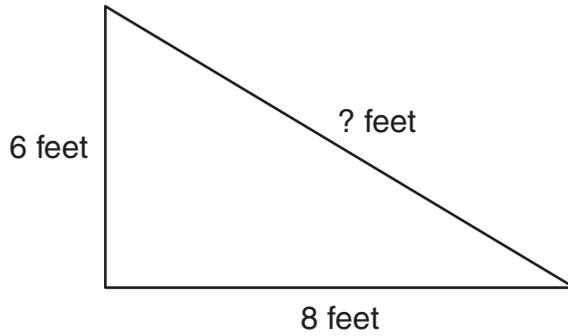
12 Look at this triangle.



The perimeter of the triangle is 24 feet. What is the length of the third side?

10 feet

12 Look at this triangle.



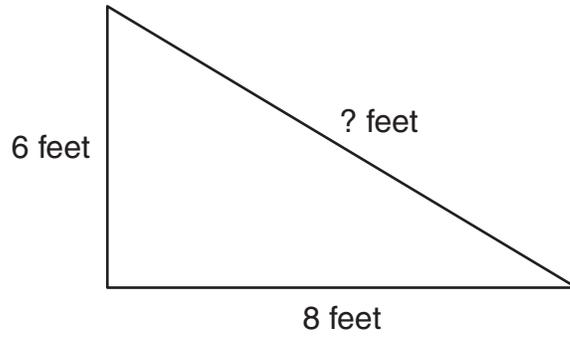
The perimeter of the triangle is 24 feet. What is the length of the third side?

10 feet

$$6 + 8 = 14$$
$$\begin{array}{r} 24 \\ - 14 \\ \hline 10 \end{array}$$

answer

12 Look at this triangle.



The perimeter of the triangle is 24 feet. What is the length of the third side?

11 feet

13 Look at this number sentence.

$$\triangle 5 = 10 - \triangle 5$$

Each triangle has the same value. What is the value of each triangle?

13 Look at this number sentence.

$$\triangle = 10 - \triangle$$

Each triangle has the same value. What is the value of each triangle?

5

13 Look at this number sentence.

$$\triangle_{10} = 10 - \triangle_{20}$$

Each triangle has the same value. What is the value of each triangle?

13 Look at this number sentence.

$$\triangle 1 = 10 - \triangle 3$$

Each triangle has the same value. What is the value of each triangle?

The value of each triangle is three because a triangle has three sides. Since the value of each triangle is three you do ten minus three equals seven.

- 14 Look at this number line.



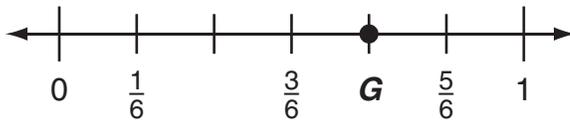
What fraction does point G represent on the number line?

$$\frac{4}{6}$$

Write a different fraction that is equivalent to the fraction you wrote in part (a).

$$\frac{2}{3}$$

- 14 Look at this number line.



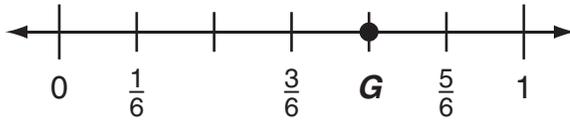
What fraction does point G represent on the number line?

$$\frac{4}{6}$$

Write a different fraction that is equivalent to the fraction you wrote in part (a).

$$\frac{8}{12}$$

- 14 Look at this number line.



What fraction does point G represent on the number line?

$$\frac{4}{6}$$

Write a different fraction that is equivalent to the fraction you wrote in part (a).

$$\frac{3}{7}$$

- 14 Look at this number line.



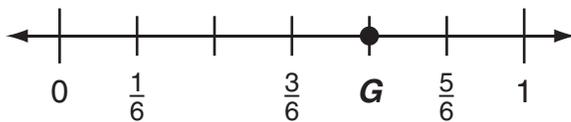
What fraction does point G represent on the number line?

$$\frac{2}{3}$$

Write a different fraction that is equivalent to the fraction you wrote in part (a).

$$\frac{4}{6}$$

- 14 Look at this number line.



What fraction does point *G* represent on the number line?

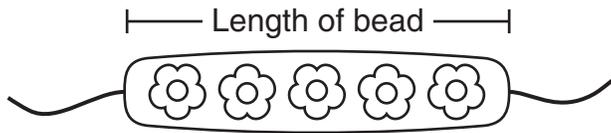
$$\frac{6}{4}$$

Write a different fraction that is equivalent to the fraction you wrote in part (a).

$$\frac{7}{5}$$

- 15 Use your ruler to answer this question.

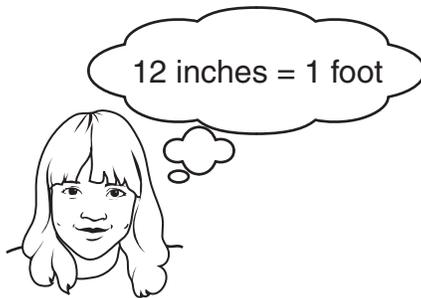
Monique has a set of beads. Each of her beads is the same length as this bead.



What is the length of this bead to the nearest inch?

2 inches

Monique wants to put 1 foot 6 inches of her beads on a string.

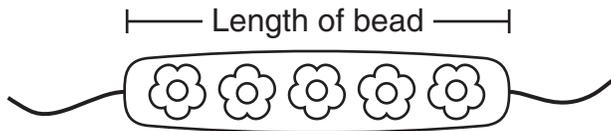


What is the total number of beads Monique needs?

9

15 Use your ruler to answer this question.

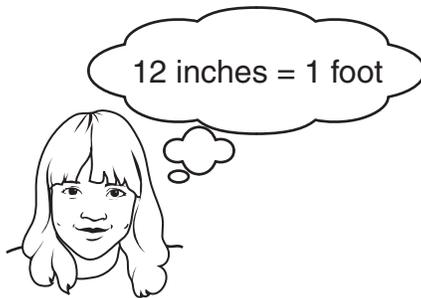
Monique has a set of beads. Each of her beads is the same length as this bead.



What is the length of this bead to the nearest inch?

2 inches

Monique wants to put 1 foot 6 inches of her beads on a string.



What is the total number of beads Monique needs?

The total number of beads Monique needs is 9.

Handwritten calculations and reasoning:

$3 \times 2 = 6$
6 beads in one foot

$3 \times 2 = 6$
3 beads in 6 inches.

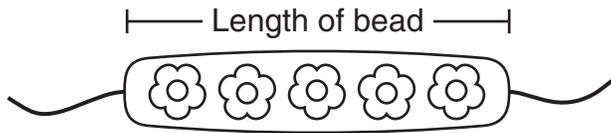
$3 + 6 = 9$
9 beads in 1 foot and 6 inches.

Vertical addition (left):
 $\begin{array}{r} +2 \\ +2 \\ +4 \\ +2 \\ +6 \\ +2 \\ +8 \\ +2 \\ +10 \\ +2 \\ \hline 12 \end{array}$

Vertical addition (middle):
 $\begin{array}{r} 2 \\ +2 \\ \hline 4 \\ +2 \\ \hline 6 \end{array}$

- 15 Use your ruler to answer this question.

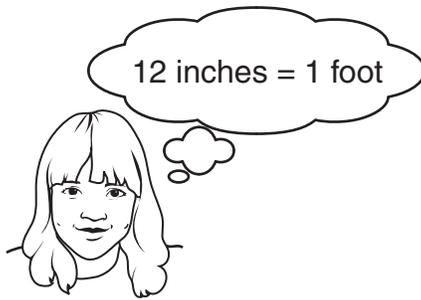
Monique has a set of beads. Each of her beads is the same length as this bead.



What is the length of this bead to the nearest inch?

2 inches

Monique wants to put 1 foot 6 inches of her beads on a string.

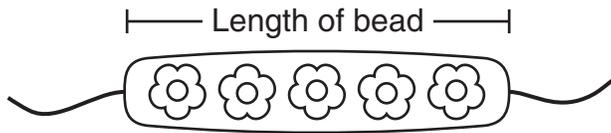


What is the total number of beads Monique needs?

$12 \text{ inches} + 6 \text{ inches} = 18 \text{ inches}$
 18 inches

- 15 Use your ruler to answer this question.

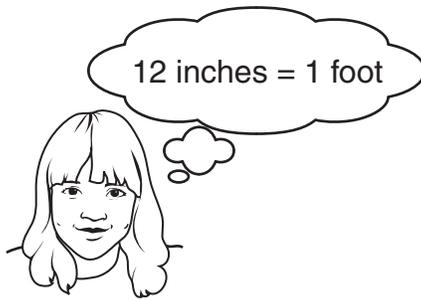
Monique has a set of beads. Each of her beads is the same length as this bead.



What is the length of this bead to the nearest inch?

$8\frac{1}{2}$ inches

Monique wants to put 1 foot 6 inches of her beads on a string.



What is the total number of beads Monique needs?

She needs 7 more beads.

16 Ms. Corrigan gave notebooks to nine students. Each notebook was either red, blue, or green.

- Red was the most common color.
- Green was less common than blue.

Complete this table to show what color notebooks Ms. Corrigan could have given to Bryce, Tanya, Walter, and Ava.

Notebooks

Student	Color
Kirk	Red
Stacey	Red
Yolanda	Green
Chuck	Green
Anthony	Blue
Bryce	blue
Tanya	Red
Walter	Red
Ava	blue

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