Name _____

Topic 1
Assessment
Form A

1. Chris and Jeff sold 15.5 pounds of trail mix. They sold the trail mix for $3.98 per pound. How much money did they collect? Explain.

2. Ilana needs d more dollars to buy a new scrapbook that costs $8.35. She has $4.88. Solve the equation $\$4.88 + d = \$8.35$ to find how much more money Ilana needs.

Ⓐ $d = \$3.57$
Ⓒ $d = \$3.42$
Ⓑ $d = \$3.47$
Ⓓ $d = \$4.12$

3. A city has 1,242 law enforcement officers in the police department. If the officers are divided equally into 18 groups, how many officers will be in each group?

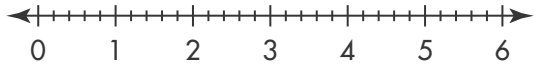
Ⓐ 60 officers
Ⓑ 68 officers
Ⓒ 69 officers
Ⓓ 70 officers

4. Russ has a car that averages 9.8 miles per gallon. Mike's car averages 39.2 miles per gallon. How many times more miles per gallon does Mike's car average than Russ's car?

5. What is the area of a rectangle with length $\frac{1}{12}$ foot and width $\frac{3}{4}$ foot?

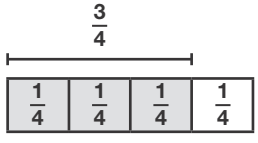
Ⓐ $\frac{1}{16}$ ft^2
Ⓑ $\frac{1}{12}$ ft^2
Ⓒ $\frac{2}{3}$ ft^2
Ⓓ $\frac{5}{6}$ ft^2

6. Raven is making pillows. Each pillow requires $\frac{3}{5}$ yard of fabric. Raven has 6 yards of fabric. Use the number line to find $6 \div \frac{3}{5}$, the number of pillows Raven can make.



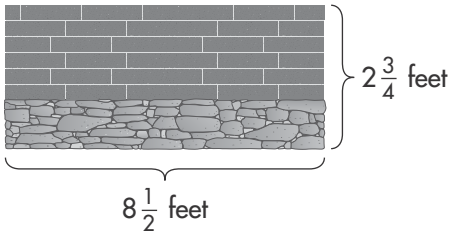
Ⓐ 10 pillows
Ⓑ 6 pillows
Ⓒ 5 pillows
Ⓓ 3 pillows

7. Find the quotient. Use the diagram to help.



$\frac{3}{4} \div \frac{1}{4}$

8. Employees of a landscaping company built a retaining wall. They used brick to make the top $\frac{2}{3}$ of the wall.



Part A

What is the height of the brick portion of the wall? Write an equation to represent your work.

Part B

Estimate the area of the whole retaining wall.

Part C

What is the area of the whole retaining wall? Write an equation to show your work. Compare your answer to your estimate to see whether your answer is reasonable.

9. Which expression has the same value as $3 \div \frac{5}{9}$?

Ⓐ $3 \times \frac{5}{9}$

Ⓑ $\frac{1}{3} \div \frac{5}{9}$

Ⓒ $3 \div \frac{9}{5}$

Ⓓ $3 \times \frac{9}{5}$

10. Holly is displaying a postcard collection on a bulletin board that is $35\frac{3}{4}$ inches wide. Each postcard is $5\frac{7}{8}$ inches wide. Holly estimates that the number of postcards she can display in each row is 7. Is this the best estimate? Explain.

11. A model train is $15\frac{3}{4}$ inches long. Each car in this train is $2\frac{5}{8}$ inches in length. How many cars are in the train?

Ⓐ 3 cars

Ⓑ 4 cars

Ⓒ 5 cars

Ⓓ 6 cars

