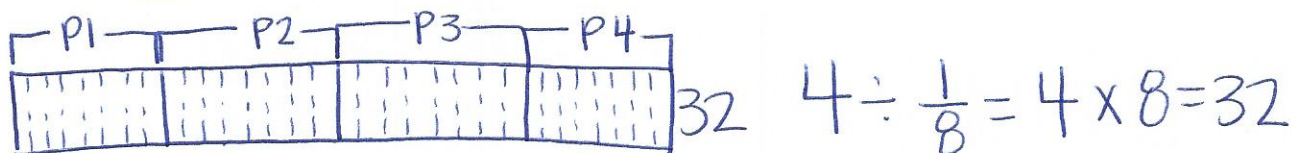Name _____   Date _____
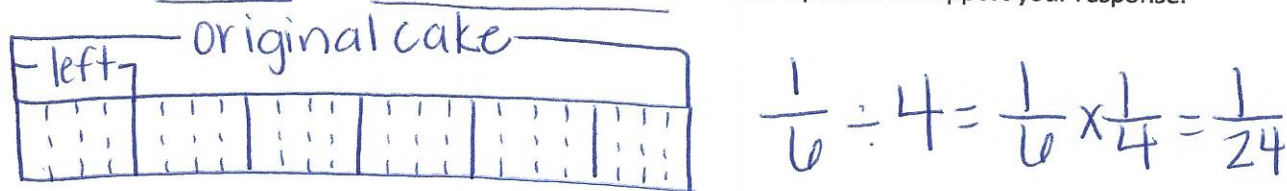
1. Kelvin ordered four pizzas for a birthday party. The pizzas were cut in eighths. How many slices were there? Draw a picture to support your response.

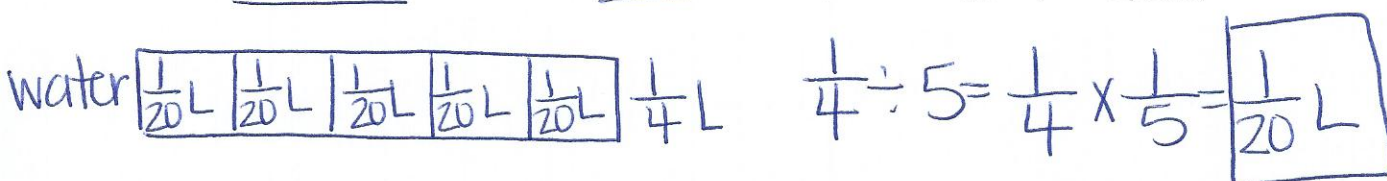

$$4 \div \frac{1}{8} = 4 \times 8 = 32$$

There were 32 slices of pizza.

2. Virgil has $\frac{1}{6}$ of a birthday cake left over. He wants to share the leftover cake with 3 friends. What fraction of the original cake will each of the 4 people receive? Draw a picture to support your response.

$$\frac{1}{6} \div 4 = \frac{1}{6} \times \frac{1}{4} = \frac{1}{24}$$

Each person will receive $\frac{1}{24}$ of the original cake.

3. A pitcher of water contains $\frac{1}{4}$ liters of water. The water is poured equally into 5 glasses.
   a. How many liters of water are in each glass? Draw a picture to support your response.

$$\frac{1}{4} \div 5 = \frac{1}{4} \times \frac{1}{5} = \frac{1}{20} L$$

   b. Write the amount of water in each glass in milliliters.

1 Liter = 1000 milliliters

$$\frac{1}{20} L = \frac{1000}{20} mL = 50 mL$$

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Lesson 27:   Solve problems involving fraction division.

4. Drew has 4 pieces of rope 1 meter long each. He cuts each rope into fifths.
   a. How many fifths will he have after cutting all the ropes?

rope $\frac{1}{5}$ [diagram: 1m 1m 1m 1m] 4m

$4 \div \frac{1}{5} = 4 \times 5 = 20$

He will have 20 fifths of rope.

   b. How long will each of the fifths be in centimeters?

Each fifth is $\frac{1}{5}$ m, so it will be 20 cm.

$1m = 100 \, cm$ $\frac{1}{5}m = \frac{100}{5} cm = 20 cm$

5. A container is filled with blueberries. $\frac{1}{6}$ of the blueberries is poured equally into two bowls.
   a. What fraction of the blueberries is in each bowl?

blueberries [diagram: B, boxes labeled 6]

$\frac{1}{6} \div 2 = \frac{1}{6} \times \frac{1}{2} = \frac{1}{12}$

$\frac{1}{12}$ of the blueberries is in each bowl.

   b. If each bowl has 6 ounces of blueberries in it, how many ounces of blueberries were in the full container?

$6 oz \times 12 \, bowls = \boxed{72 \, ounces \, total}$

   c. If $\frac{1}{5}$ of the remaining blueberries are used to make muffins, how many pounds of blueberries are left in the container?

[diagram: B | M | remaining; 12 oz | 3/4 | ...; 3/4 lb; 3 3/4 lb]

$72 oz = 4\frac{1}{2} lb$

$4\frac{1}{2} - \frac{3}{4} = 3\frac{3}{4} lb$

$\frac{1}{5} \times 3\frac{3}{4} = \frac{1}{5} \times \frac{15}{4}^3 = \frac{3}{4}$

$3\frac{3}{4} - \frac{3}{4} = 3$

1 pound = 16 oz

$4\frac{1}{2} lb = \overset{\times 4\frac{1}{2}}{72} oz$

$\begin{array}{r} 4\,R8 \\ 16\overline{)72} \\ -64 \\ \hline 8 \end{array}$

There are 3 pounds left in the container.