Name: _____
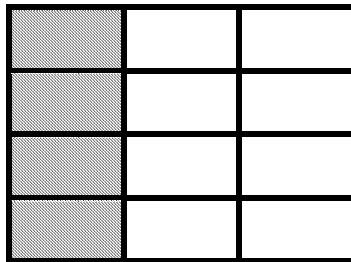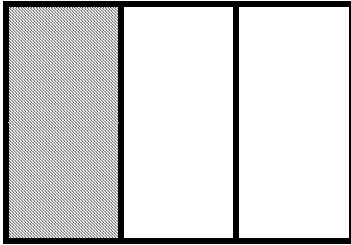
<u>Dividing Fractions</u>
NF.7 Divide fraction by a whole number, whole number by a fraction, and solve real world problems.
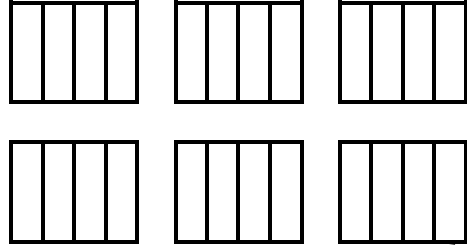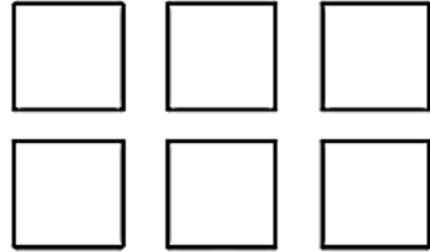
Dividing a Fraction by a Whole Number
$$\frac{1}{3} \div 4 = \frac{1}{12}$$

Dividing a Whole Number by a Fraction
$$6 \div \frac{1}{4} = 24$$

How many are there altogether?

Strategy: $\frac{1}{6} \div 2 = ?$

$$\frac{1}{6} \div \frac{2}{1} = ?$$

Keep   **S**witch   **F**lip

$$\frac{1}{6} \quad X \quad \frac{1}{2} = \left(\frac{1}{12}\right)$$

Strategy: $3 \div \frac{1}{7} = ?$

$$\frac{3}{1} \div \frac{1}{7} = ?$$

Keep   **S**witch   **F**lip

$$\frac{3}{1} \quad X \quad \frac{7}{1} = \frac{21}{1} = \left(21\right)$$

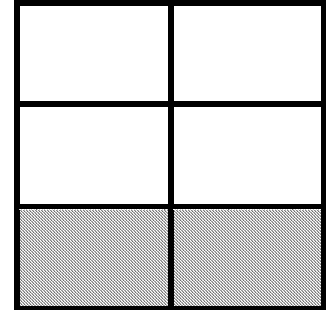**Example of dividing a fraction by a whole number:**

A popcorn store donates its boxes of popcorn for use as prizes at a team competition. How much popcorn does each team member get if a two-person team shares a 1/3 pound box?

Strategy for equation:

$\underline{K}$eep $\underline{S}$witch $\underline{F}$lip

2 wholes = $\dfrac{2}{1}$

1/3 ÷ 2 = 1/6

1/3 x 1/2 = 1/6
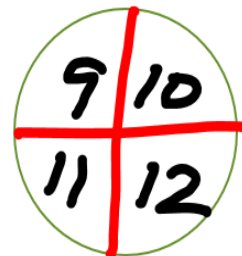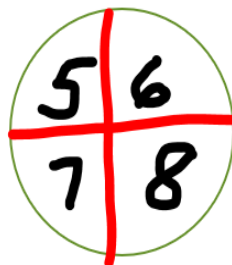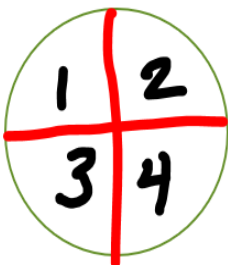
Answer: Each team member gets 1/6-pound box of popcorn.

Example of dividing a whole number by a fraction:

How many 1/4 cup servings are in 3 cups of chocolate?

3 ÷ 1/4 = 12

= 12

1	2
3	4

5	6
7	8

9	10
11	12

Answer: There are 12, 1/4 cup servings in 3 cups of chocolate.