

List 3 expressions that are  
equivalent to  $\frac{4}{5}$

# **Mutlplying and Dividing Fractions**

Essential Question: Compare multiplying fractions to adding them.

## Multiplying Fractions

### Steps

1) Multiply numerators

2) Multiply denominators

3) Simplify

### Example

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

$$\frac{3 \times 1}{4 \times 3} = \frac{3}{12}$$

$$\frac{3}{12} \frac{3}{3} = \frac{1}{4}$$

ex 1

$$\frac{2}{3} \times \frac{4}{5}$$

Picture

Algebraic

ex 2

$$\frac{5}{12} \times 2\frac{2}{5}$$

ex 3

$$\frac{3}{4} \times \frac{2}{9}$$

$$\frac{1}{5} \times \frac{2}{3}$$

$$\frac{4}{5} \times \frac{7}{8}$$



$$\frac{1}{2} \times \frac{1}{3}$$

$$2\frac{1}{2} \times \frac{5}{6}$$

## Dividing Fractions

### Steps

1) Flip the 2nd number.

2) Multiply

3) Simplify

### Example

$$\frac{7}{15} \div \frac{4}{5}$$

$$\frac{7}{15} \times \frac{5}{4}$$

$$\frac{7 \times 5}{15 \times 4} = \frac{35}{60}$$

$$\frac{35}{60} = \frac{7}{12}$$

ex 4

$$\frac{1}{3} \div \frac{1}{2}$$

Picture

Algebraic

ex 5  $2\frac{5}{6} \div \frac{1}{3}$

$$\frac{3}{4} \div \frac{1}{2}$$

$$\frac{7}{8} \div \frac{9}{10}$$

$$1\frac{5}{7} \div \frac{2}{3}$$



Andrew usually walks his dog 4 miles each Saturday. Last Saturday, Andrew walked only  $\frac{2}{3}$  of his usual distance because it started raining. How far did Andrew walk?

I have  $2 \frac{1}{2}$  yards of ribbon. I want to cut it into  $\frac{1}{4}$  length pieces. How many pieces will I get?