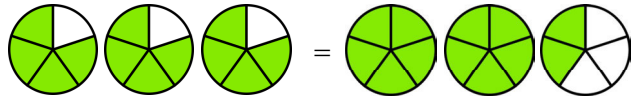# Multiply Fractions by Whole Numbers

$3 \times \dfrac{4}{5}$ is three copies of $\dfrac{4}{5}$. (Look at the picture.)

How many fifths are there in total?

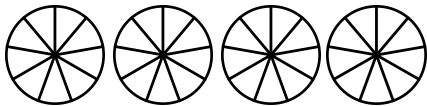There are 12 fifths. So, $3 \times \dfrac{4}{5} = \dfrac{12}{5}$.

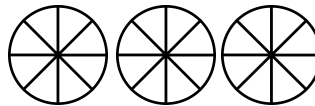Lastly we give the answer as a *mixed number*: 12/5 is 2 2/5.

$$3 \times \dfrac{4}{5} = \dfrac{12}{5} = 2\dfrac{2}{5}$$

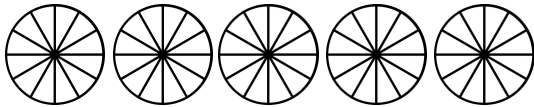1. Repeatedly color in the parts to solve the multiplications. *Give your answer as a mixed number*.
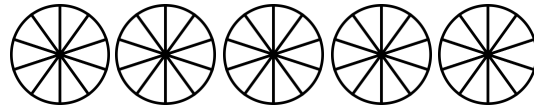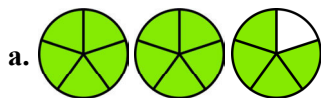
a. $4 \times \dfrac{7}{9} =$

b. $3 \times \dfrac{5}{8} =$

c. $5 \times \dfrac{11}{12} =$

d. $6 \times \dfrac{7}{10} =$

2. Fill in.
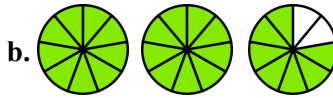
a.

$2\dfrac{4}{5} = 2 \times \dfrac{}{}$

b.

$\dfrac{25}{9} = 5 \times \dfrac{}{}$

c.
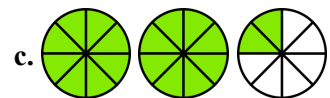
$2\dfrac{2}{8} = 3 \times \dfrac{}{}$

Solve, for example by drawing.

3. Erica's tall drinking glasses each hold 3/8 liters.
   How much water does she need to fill four of them?

4. Marlene wants to triple this recipe (make it three times).
   How much of each ingredient will she need?

Brownies

3/4 cup butter
1 1/2 cups brown sugar
4 eggs
1 1/4 cups cocoa powder
1/2 cup flour
2 tsp vanilla