

Multiplying Fractions by Whole Numbers 1

1. Color repeatedly, and solve the multiplications.

a. First color $\frac{3}{8}$. Then color another $\frac{3}{8}$.

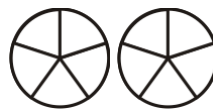
Continue until you've colored five times $\frac{3}{8}$.



$$5 \times \frac{3}{8} =$$

b. First color $\frac{2}{5}$. Then color another $\frac{2}{5}$.

Continue until you've colored four times $\frac{2}{5}$.



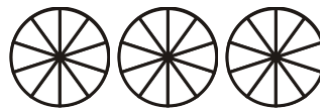
$$4 \times \frac{2}{5} =$$

c. Color five times $\frac{7}{12}$.



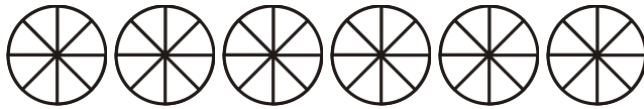
$$5 \times \frac{7}{12} =$$

d. Color five times $\frac{6}{10}$.



$$5 \times \frac{6}{10} =$$

e. Color nine times $\frac{5}{8}$.



$$9 \times \frac{5}{8} =$$

The multiplication of whole numbers can be solved by **repeated addition**:

$$5 \times 4 = 4 + 4 + 4 + 4 + 4 = 20$$

$$3 \times 120 = 120 + 120 + 120 = 360$$

Multiplying a fraction by a whole number can be solved the same way:

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

$$5 \times \frac{2}{9} = \frac{2}{9} + \frac{2}{9} + \frac{2}{9} + \frac{2}{9} + \frac{2}{9} = \frac{10}{9} = 1 \frac{1}{9}$$

2. Write the multiplication problems as addition problems and solve them. Remember to give your answer as a mixed number and to simplify the fractional parts to lowest terms whenever possible.

a. $5 \times \frac{1}{4} =$

b. $2 \times \frac{2}{3} =$

c. $4 \times \frac{2}{7} =$

d. $5 \times \frac{2}{10} =$

e. $6 \times \frac{2}{7} =$

f. $7 \times \frac{2}{19} =$