

Name \_\_\_\_\_

# More Equivalent Fractions

**Find the missing number, n.**  $\frac{1}{4} = \frac{n}{12}$

Look at both of the denominators. Think what times 4 is 12. The answer is 3. So multiply the numerator and denominator of the fraction  $\frac{1}{4}$  by 3.

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

So, n = 3.

## Try These!

$$\textcircled{1} \quad \frac{2}{3} = \frac{n}{15}$$

$$\textcircled{2} \quad \frac{3}{7} = \frac{n}{14}$$

$$\textcircled{3} \quad \frac{6}{9} = \frac{n}{36}$$

$$\textcircled{4} \quad \frac{2}{5} = \frac{n}{20}$$

There are 2 ways to find equivalent fractions: (1) by using multiplication or (2) by using division.

**Example:** Find an equivalent fraction for  $\frac{3}{4}$  using multiplication.

**Steps:** 1. Choose any number (except 1 or 0), say 6.

2. Multiply the numerator by 6.

$$3 \times 6 = 18$$

3. Multiply the denominator by 6.

$$4 \times 6 = 24$$

4. The fractions are equivalent.

$$\frac{3}{4} = \frac{3 \times 6}{4 \times 6} = \frac{18}{24}$$

## Try These!

$$\textcircled{5} \quad \frac{3}{7} = \frac{3 \times 4}{7 \times 4} =$$

$$\textcircled{6} \quad \frac{5}{9} = \frac{5 \times 7}{9 \times 7} =$$

$$\textcircled{7} \quad \frac{4}{6} = \frac{4 \times 12}{6 \times 12} =$$

**Example:** Find an equivalent fraction for  $\frac{20}{25}$  using division.

**Steps:** 1. Choose a number that divides into 20 and 25 evenly, say 5.

2. Divide the numerator by 5.

$$20 \div 5 = 4$$

3. Divide the denominator by 5.

$$25 \div 5 = 5$$

4. The fractions are equivalent.

$$\frac{20}{25} = \frac{20 \div 5}{25 \div 5} = \frac{4}{5}$$

## Try These!

$$\textcircled{8} \quad \frac{9}{12} = \frac{9 \div 3}{12 \div 3} =$$

$$\textcircled{9} \quad \frac{16}{18} = \frac{16 \div 2}{18 \div 2} =$$

$$\textcircled{10} \quad \frac{24}{36} = \frac{24 \div 6}{36 \div 6} =$$

**Note:** Multiplying or dividing the numerator and denominator by the same number does not change the value because it is the same as multiplying or dividing by one.

Remember  $\frac{3}{3} = 1$ ,  $\frac{4}{4} = 1$ , etc.