Find Equivalent Fractions and Fractions in Simplest Form

Equivalent Fractions

Equivalent fractions name the same part. To find an equivalent fraction, multiply the numerator and denominator by the same number.

$$\frac{1 \times 2}{3 \times 2} = \frac{2}{6} \qquad \frac{1 \times 3}{3 \times 3} = \frac{3}{9} \qquad \frac{1 \times 4}{3 \times 4} = \frac{4}{12}$$

So, $\frac{1}{3}$, $\frac{2}{6}$, $\frac{3}{9}$, and $\frac{4}{12}$ are equivalent fractions.

Simplest Form

When a fraction is in simplest form, its numerator and denominator have only 1 as a common factor.
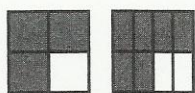
Show $\frac{6}{8}$ in simplest form.

1. Find the greatest common factor of the numerator and denominator.
   factors of 6: 1, 2, 3, 6
   factors of 8: 1, 2, 4
   The greatest common factor is 2.
2. Divide the numerator and denominator by the greatest common factor.

$$\frac{6}{8} = \frac{6 \div 2}{8 \div 2} = \frac{3}{4}$$ So, the simplest form of $\frac{6}{8}$ is $\frac{3}{4}$.
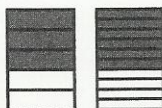

Complete to find equivalent fractions.

1.

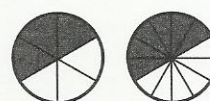 $\frac{3}{4} = \frac{\square}{8}$

2.

   $\frac{3}{5} = \frac{\square}{10}$

3.

   $\frac{3}{6} = \frac{\square}{12}$

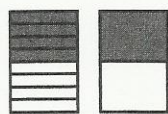4. $\frac{3}{4} = \frac{3 \times \square}{4 \times \square} = \frac{\square}{\square}$

5. $\frac{3}{5} = \frac{3 \times \square}{5 \times \square} = \frac{\square}{\square}$

6. $\frac{3}{6} = \frac{3 \times \square}{6 \times \square} = \frac{\square}{\square}$

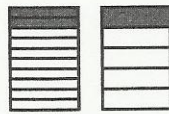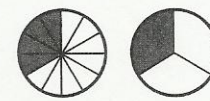Write each fraction in simplest form.

7.

   $\frac{4}{8} = \underline{\quad}$

8.

   $\frac{2}{10} = \underline{\quad}$

9.

   $\frac{4}{12} = \underline{\quad}$