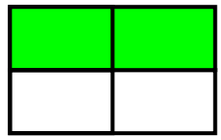
Equivalent Fractions - *Fractions worksheets*

Fractions having the same value are called the equivalent fractions. Look at two rectangles below, the shaded parts of both the rectangles represent the two equivalent fractions:

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

Notice that both the fractions represent the same shaded area but written in two different ways. If you see carefully at the numerators of both the fractions: the numerator of the second fraction is 2 times the numerator of the first fraction. Also the denominator of the second fraction is 2 times the denominator of the first fraction. Which means, to get an equivalent fractions to a given fraction, multiply the numerator and denominator of the given fraction by the same number.

In above picture $\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$

Example 1: Find three equivalent fractions to each of the following fractions:

Given fraction	First equivalent fraction	Second equivalent fraction	Third equivalent fraction
$\frac{1}{2}$	$\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$	$\frac{1 \times 3}{2 \times 3} = \frac{3}{6}$	$\frac{1 \times 4}{2 \times 4} = \frac{4}{8}$
$\frac{9}{12}$	$\frac{9 \div 3}{12 \div 3} = \frac{3}{4}$	$\frac{9 \times 2}{12 \times 2} = \frac{18}{24}$	$\frac{9 \times 3}{12 \times 3} = \frac{27}{36}$
$\frac{24}{36}$	$\frac{24 \div 2}{36 \div 2} = \frac{12}{18}$	$\frac{24 \div 3}{36 \div 3} = \frac{8}{12}$	$\frac{24 \div 4}{36 \div 4} = \frac{6}{9}$