

## Simplifying Fractions 1

Look at the fraction below...

$\frac{4}{6}$  We can simplify or reduce this fraction to show it in its lowest terms or simplest form. First we must find the factors for each digit.

$\frac{4}{6}$  = 1, 2, 4                      Which number is a factor of each digit?  
          = 1, 2, 3, 6

$\frac{4}{6}$  = 1, (2), 4                      '2' is called a common factor as both 4 and 6  
          = 1, (2), 3, 6                      can be divided by it. If we do this, the  
                                                       fraction will be seen in its simplest form.

$\frac{4}{6}$   $\div 2 = \underline{2}$                       So our new simplified fraction is  $\frac{2}{3}$   
           $\div 2 = 3$

Using this knowledge, complete the table below.

Starting Fraction	Factors	Greatest Common Factor	Calculation	Simplified Fraction
$\frac{4}{6}$	1, 2, 4 1, 2, 3, 6	2 2	$\frac{4}{6} \div 2 = \frac{2}{3}$	$\frac{2}{3}$
$\frac{8}{12}$				
$\frac{12}{15}$				
$\frac{10}{18}$				
$\frac{4}{16}$				
$\frac{10}{20}$				

## Simplifying Fractions 1- Answers

Starting Fraction	Factors	Greatest Common Factor	Calculation	Simplified Fraction
$\frac{4}{6}$	1, 2, 4 1, 2, 3, 6	2 2	$4 \div 2 = 2$ $6 \div 2 = 3$	$\frac{2}{3}$
$\frac{8}{12}$	1, 2, 4, 8 1, 2, 3, 4, 6, 12	4 4	$8 \div 4 = 2$ $12 \div 4 = 3$	$\frac{2}{3}$
$\frac{12}{15}$	1, 2, 3, 4, 6, 12 1, 3, 5, 15	3 3	$12 \div 3 = 4$ $15 \div 3 = 5$	$\frac{4}{5}$
$\frac{10}{18}$	1, 2, 5, 10 1, 2, 3, 6, 9, 18	2 2	$10 \div 2 = 5$ $18 \div 2 = 9$	$\frac{5}{9}$
$\frac{4}{16}$	1, 2, 4, 1, 2, 4, 8, 16	4 4	$4 \div 4 = 1$ $16 \div 4 = 4$	$\frac{1}{4}$
$\frac{10}{20}$	1, 2, 4, 5, 10 1, 2, 4, 5, 10, 20	10 10	$10 \div 10 = 1$ $20 \div 10 = 2$	$\frac{1}{2}$