



## Maths Assessment Year 6: Fractions

1. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

a) Simplify these fractions:

$\frac{5}{20}$	
$\frac{6}{9}$	
$\frac{9}{12}$	
$\frac{4}{8}$	
$\frac{8}{10}$	

b) Identify the equivalent fraction, using the denominators shown:

$\frac{2}{10}$	=	$\frac{1}{5}$
$\frac{2}{8}$	=	$\frac{1}{4}$
$\frac{4}{12}$	=	$\frac{1}{3}$
$\frac{5}{15}$	=	$\frac{1}{3}$
$\frac{10}{12}$	=	$\frac{5}{6}$

## 2. Compare and order fractions, including fractions $> 1$ .

a) Put these fractions in order, from smallest to largest:

$\frac{3}{4}$	$1\frac{3}{4}$	$\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$\frac{1}{2}$



1 $\frac{1}{6}$	1 $\frac{1}{3}$	$\frac{5}{6}$	$\frac{1}{6}$	$\frac{2}{3}$	$\frac{1}{3}$

smallest

largest

**b)** Use the symbols  $<$   $>$  or  $=$  to compare each pair of fractions:

	$<$ $>$ or $=$	
$\frac{1}{3}$		$\frac{4}{6}$
$\frac{3}{6}$		$\frac{1}{2}$
$\frac{3}{10}$		$\frac{1}{5}$
1 whole		$\frac{5}{5}$

**3.** Multiply simple pairs of proper fractions, writing the answer in its simplest form.

Answer these calculations:

$\frac{1}{4} \times \frac{1}{2} =$
$\frac{1}{2} \times \frac{1}{3} =$
$\frac{1}{5} \times \frac{1}{2} =$
$\frac{2}{8} \times \frac{1}{2} =$

**4.** Divide proper fractions by whole numbers.

Answer these calculations:

$\frac{3}{4} \div 3 =$
$\frac{1}{4} \div 2 =$
$\frac{4}{6} \div 2 =$
$\frac{2}{3} \div 4 =$



5. Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.

a) Find  $\frac{1}{4}$  of 160, showing the calculation(s) you would use:

.....  
.....  
.....  
.....

b) Find  $\frac{2}{3}$  of 99, showing the calculation(s) you would use:

.....  
.....  
.....  
.....

6. A farmer has four plots of land, each with an area of 12 acres. He divides them into a number of parts, each with an area of  $8/9$  acre. How many parts are there on the four plots of land?

7. Kathy has 9 sticks of modeling clay. She cuts the sticks into thirds and shares the pieces equally with some children. Each child gets  $2/3$  of a stick. How many children are there altogether?