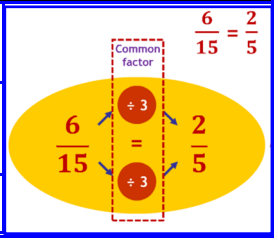
Year 6 Maths Non-Negotiables

Key Terms

1	**Fraction**	The division of one whole number by another.
2	**Numerator**	How many parts we have (top number).
3	**Denominator**	The size of the parts (bottom number).
4	**Vinculum**	Horizontal line separating the numerator and denominator.
5	**Equivalent Fraction**	Fractions that have the same value though they may look different.
6	**Simplest Form**	When the numerator and denominator cannot be any smaller (while being whole numbers).
7	**Highest Common Factor**	The highest number that can be divided exactly into each of two or more numbers.
8	**Lowest Common Multiple**	The smallest number which is a shared multiple of two or more numbers.

Simplifying fractions

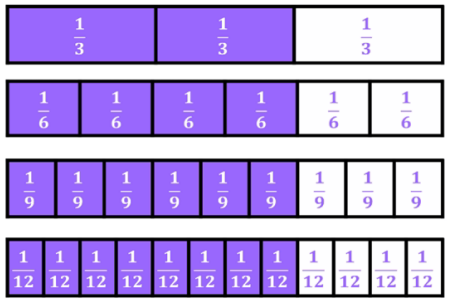
1	Find the highest common factor of the numerator and denominator.
2	Divide both the numerator and denominator by the HCF.
3	Check if it can simplified further.



Equivalent fractions

A fraction can have the same value (be equivalent) even if the numerators and denominators have changed.

To create an equivalent fraction you must multiply or divide the numerator and denominator by the same number.



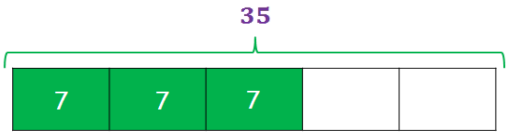
Adding and subtracting fractions

To add or subtract fractions the denominators must always be the same.

1	Find the lowest common multiple.	$\frac{1}{3} + \frac{1}{4} = \frac{\square}{\square}$ 3, 6, 9, (12), 15, 18, 4, 8, (12),
2	Multiply the denominators to get to the lowest common multiple. Whatever you do to the denominator you must do to the numerator.	$\frac{1}{3} + \frac{1}{4} =$ (x 4, x 3) $\frac{4}{12} + \frac{3}{12} =$ (x 4, x 3)
3	Add or subtract the numerators. The denominator stays the same. (Check to see if you can simplify your answer).	$\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$ $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$

Finding a fraction of a number.

1	Write the question (of is the same as ×)	$\frac{3}{5}$ *of* 35 =
2	Divide by the denominator.	35 ÷ 5 = 7 $\quad \frac{1}{5}$ *of* 35 = 7
3	Multiply by the numerator.	3 x 7 = 21 $\quad \frac{3}{5}$ *of* 35 = 21



$\frac{3}{5}$ *of* 35 = 21