Ratio & Proportion

		Example
Ratio	Used to compare the size of / difference between quantities	The ratio of blue cars to green is 1:2 *this means* there are two green cars for every blue car A loaf of bread costs £1.15. The ratio for this is 1:1.15
	Ratios can have more than two numbers	The ratio of ingredients (butter, sugar, flour, eggs) in a 6oz cake mix is 6:6:6:3 *this means* 6oz butter, 6oz sugar, 6oz flour, 3 eggs This ratio can be simplified by dividing the ratios by their common factor of 3 and becomes: 2:2:2:1 *this means* there are 2oz of butter, 2oz flour, 2oz sugar to 1 egg *OR* *there are* 2 parts flour, 2 parts butter, 2 parts sugar and 1 part egg = 7 parts
Direct Proportion	Quantities are in direct proportion when the pair of values increase or decrease but the ratio remains the same	A loaf of bread costs £1.15. The ratio is 1:1.15 If we buy 10 loaves of bread the cost changes but the ratio remains the same.

Loaves	Cost £	Ratio of number of loaves to cost	
1	1.15	$\dfrac{1.15}{1}$	1:1.15
2	2.30	$\dfrac{2.30}{2}$	1:1.15
3	3.45	$\dfrac{3.45}{3}$	1:1.15
5	5.75	$\dfrac{5.75}{5}$	1:1.15
10	11.50	$\dfrac{11.50}{10}$	1:1.15