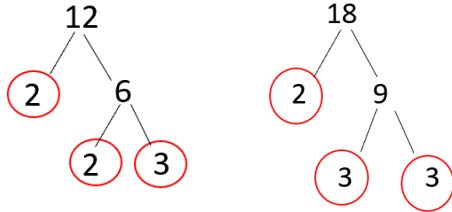
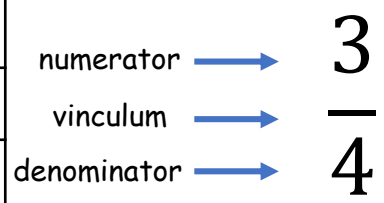
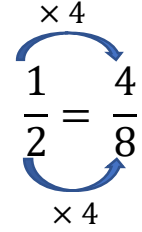
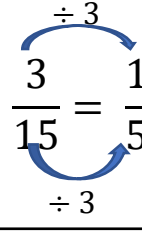
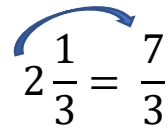
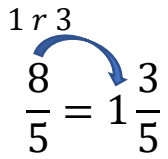


## Unit 13 - Prime factorisation

No	Question	Answer	Example
13.1	What is a prime number?	A number that has exactly two factors, one and itself.	2, 3, 5, 7, 11, 13, 17, 19, 23...
13.2	What is a square number?	The result of multiplying a number by itself.	$5^2 = 5 \times 5$ $6^2 = 6 \times 6$
13.3	What is an integer?	A whole number.	2, 10, 802, 90 <b>NOT</b> 3.2 or $\frac{5}{6}$
13.4	What is a multiple?	A number in the times table.	The first 5 multiples of 4 are: 4, 8, 12, 16, 20
13.5	What is a factor?	A number that divides into another number without any remainder.	The factors of 12 are: 1, 2, 3, 4, 6, 12
13.6	What is the HCF?	The highest common factor (the largest integer that is a factor of both numbers).	The HCF of 12 and 20 is 4 The HCF of 100 and 120 is 10
13.7	What is the LCM?	The lowest common multiple (the smallest number that is a multiple of both numbers).	The LCM of 4 and 6 is 12 The LCM of 15 and 20 is 60
13.8	What does index form mean?	Writing a multiplication calculation using powers.	Writing: $2 \times 2 \times 2 \times 2 \times 3 \times 3$ As: $2^4 \times 3^2$ (index form)
13.9	What are the prime factors?	The factors of a number that are also prime numbers.	The prime factors of 12 are: 2 and 3
13.10	What is prime factor decomposition?	Breaking down a number into the product of its prime factors, using a prime factor tree.	
13.12	What does product mean?	Multiply	What is the product of 4 and 9? $4 \times 9 = \underline{36}$

## Unit 14 - Equivalent fractions

No	Question	Answer	Example
14.1	What is the numerator?	The top part of a fraction	
14.2	What is the denominator?	The bottom part of a fraction	
14.3	What is the vinculum?	The division line in a fraction	
14.4	How do you find an equivalent fraction?	$\times / \div$ the numerator AND denominator by the same number	
14.5	How do you simplify a fraction?	$\div$ the numerator AND denominator by their HCF	
14.6	How do you convert mixed numbers to improper (top-heavy) fractions?	Multiply the denominator of the fractional part by the whole number, and add the result to the numerator.	$2 \times 3 + 1 = 7$ 
14.7	How do you convert improper fractions to mixed numbers?	<ol style="list-style-type: none"> <li>1. Divide the numerator by the denominator.</li> <li>2. Write down the whole number answer.</li> <li>3. Then write down any remainder above the denominator.</li> </ol>	$8 \div 5 = 1 \text{ r } 3$ 
14.8	How do you compare and order fractions?	Make the denominators the same	$\frac{2}{3} \quad \frac{3}{6} \quad \frac{7}{9}$  $\frac{12}{18} \quad \frac{9}{18} \quad \frac{7}{18}$