1) List the factors of 100



2) Work out 4.05 + 368.9

3) Work out -5 - 4

4) Work out  $65 \times 74$ 

5) Work out  $0.6 \times 12$ 

1) Work out 12 - 4 + 3

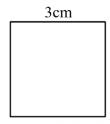


2) Simplify 12a - 4a + 3a + 2b

3) Solve 10x - 2 = -7

4) Find the mean of 21, 32, 24, 19

5) Calculate the area and perimeter of a square with side length 3cm



1) Expand and simplify 3(2x - 5) - 2(3x - 10)



2) Solve the equation 3(4x - 2) = 270

3) Work out £1012 ÷ 22

4) Express 156 as a product of prime factors

5) If the nth term of a sequence is 5n - 7, what is the  $8^{th}$  term?

## 1) Find 55% of 420



2) Complete 0.34kg ...... 89g ( <, = or > )

3) Work out the value of 6n - 12 when n = 0

4) Work out  $0.03 \times 1.1$ 

5) Simplify the ratio 70 cl: 2 l (70 centilitres : 2 litres)

1) Solve the equation 2x - 18 = 5x + 3



2) Expand and simplify 6(5a + 3b) + 4(2a - b)

3) Work out  $27 \div 5$ 

4) Find 35% of £340

5) Divide £90 in the ratio 3:2

1) Work out  $(4 + 3^2) \times 2$ 



2) If the n<sup>th</sup> term of a sequence is 2.5n + 7, what is the 4<sup>th</sup> term?

3) Factorise 21 - 28x and factorise fully  $15x^2 + 6x^3$ 

4) Express 240 as a product of its prime factors

5) How much change from £10 would you get if you bought two items costing £2.74 each?

1) Work out  $\frac{5}{6} + \frac{3}{8}$ 



2) Round 94.38 to 1 significant figure

3) Work out  $\frac{3}{8} \div \frac{1}{4}$ 

4) Factorise fully  $12x + 18x^2$ 

5) Find the lowest common multiple of 10 and 8

## 1) Work out $64 \times 64$



2) Express  $\frac{9}{40}$  as a percentage

3) What is the 13<sup>th</sup> square number?

4) Find 75% of £320

5) Calculate the circumference of a circle with radius 8m. Leave your answer in terms of  $\boldsymbol{\pi}$ 

## 1) Work out $\frac{4}{5} \div \frac{2}{9}$



2) By rounding each number to one significant figure, estimate  $\frac{623\times767.34}{282.1+142}$ 

3) Increase £4620 by 15%

4) Find the nth term of this sequence 76, 88, 100, 112, ...

5) Solve the equation 7x - 4 = 5x - 3

1) Work out the value of  $2x^2 + 3x$  when x = 5



2) Expand and simplify 4(b+3a)-3(3a-b)

3) Work out  $3435 \div 0.05$ 

4) Work out  $2 \times 5^2 - 20 \div 2$ 

5) Work out  $\frac{5}{6}$  of 642

1) Solve 10x - 8 > 6 and display the solution on a number line



2) Work out  $2.632 \div 0.07$ 

3) Express  $\frac{1}{3}$  as a percentage

4) Factorise fully  $18x^3 - 24x^2$ 

5) Make x the subject of  $y = a\sqrt{x} + b$ 

## 1) Express 196 as a product of primes, and hence find its square root



2) Decrease £90 by 15%

3) Work out four fifths of 4140

4) Estimate, by rounding each number to one significant figure,  $\frac{306.4\times58.3}{92.76}$ 

5) Work out the value of 10x - 3x when x = -3