## Homework 18

Where a question asks you to show working, you will only be awarded the mark for a correct answer if it is supported by an appropriate method.

## Due in:

1. Circle the prime numbers and draw squares around the square numbers in the list below:

3. Showing a clear written method calculate the product of 85 and 237.

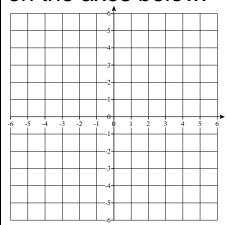
17, 23, 36, 37,

45, 51, 94

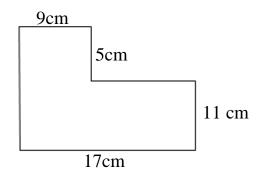
2. Showing a clear written method divide 3864 by 12.

4. Three sevenths of an amount is 24. What is one and one third of the amount?

5. Draw the graph of y = 2 on the axes below.



8. Calculate the perimeter of the shape below:



- 6. Convert 5.6 kilometres into metres then centimetres.
- 9. Write down the first five terms of the following sequence:

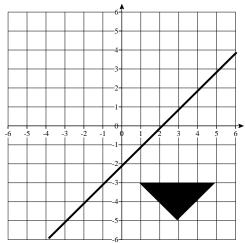
$$T(n) = -2n + 6$$

7. Solve the equation: (Note: The answer is not an integer!)

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$$7(2x - 3) = 42$$

10. Reflect the shape in the mirror line shown.



11. The dimensions	of	a
cuboid are:		

Length = x cm Width = 8 cm Height = 5 cm If the volume is 120cm<sup>3</sup>, what is the length of the cuboid?

14. Substitute the values 
$$a = 4$$
,  $b = 3$ ,  $c = -2$  into the expression

$$3a^2 - b(c - 5a)$$

12. One of the angles in an isosceles triangle is 102°. What are the other two angles of the triangle?

15. The mean of a set of 6 numbers is 9. Five of the numbers are 1, 2, 3, 8, and 12. What is the sixth number?

$$\frac{4.12^3 \times 1.69}{5.213^2}$$

16. Write 526 as the product of its prime factors.

17. A mirror is reduced by 30% in the sales. It originally cost £74. How much is it in the sale?	19. If the graph of y= 3x - 11 is drawn what are the coordinates of the y intercept?
18. Calculate the answer using a clear written method:  13.47 x 21	20. A circle has a radius of 24.6 cm. What is the circumference? Give your answer to 1 decimal place.

## Total:

