

# Homework 16

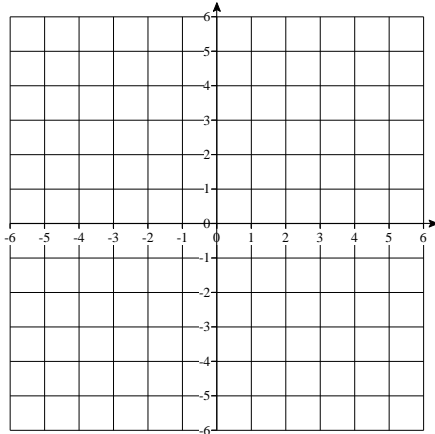
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Where a question asks you to show working, you will only be awarded the mark for a correct answer if it is supported by an appropriate method.

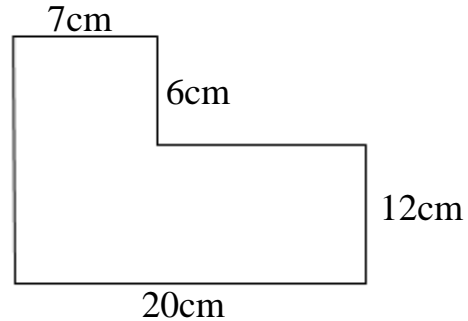
Due in:

<p>1. Circle the prime numbers and draw squares around the square numbers in the list below:</p> <p>10, 23, 49, 47,</p> <p>63, 169, 250</p>	<p>3. Showing a clear written method calculate the product of 48 and 54.</p>
<p>2. Showing a clear written method divide 3290 by 14.</p>	<p>4. Two thirds of an amount is 16. What is one and one half of the amount?</p>

5. Draw the graph of  $y = x$  on the axes below.



8. Calculate the perimeter of the shape below:



6. Convert 8.34 kilometres into metres then centimetres.

9. Write down the first five terms of the following sequence:

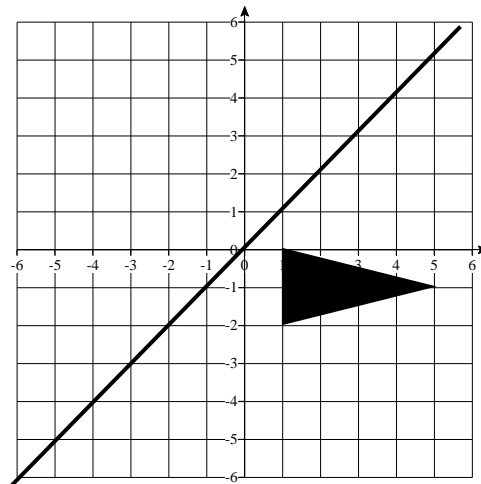
$$T(n) = 6n + 2$$

7. Solve the equation:

(Note: The answer is a negative fraction!)

$$2(3x - 4) = -10$$

10. Reflect the shape in the mirror line shown.



<p>11. The dimensions of a cuboid are:</p> <p>Length = 8 cm Width = 7cm Height = 40 mm What is the volume of the cuboid?</p>	<p>14. Substitute the values <math>a = 6</math>, <math>b = -4</math>, <math>c = 3</math> into the expression</p> $2a^2 - 4(b + 2c)$
<p>12. One of the angles in an isosceles triangle is <math>138^\circ</math>. What are the other two angles of the triangle?</p>	<p>15. The mean of a set of 6 numbers is 17. Five of the numbers are 3, 8, 10, 15 and 22. What is the sixth number?</p>
<p>13. Estimate the answer to</p> $\frac{13.2^2 \times 19.8}{11.2^3}$	<p>16. Write 225 as the product of its prime factors.</p>

17. A toaster is reduced by 15% in the sales. It originally cost £55. How much is it in the sale?

19. If the graph of  $y = 10x - 2$  is drawn what are the coordinates of the y intercept?

18. Calculate the answer using a clear written method:

$$15.9 \times 11$$

20. A circle has a radius of 8.4 cm. What is the circumference? Give your answer to 1 decimal place.

Total:

