

Homework 14

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. The diameter of a circle is 53cm. Calculate its area. Give your answer correct to 2dp</p>	<p>3. Using a clear written method: Add five-twelfths and four-fifths.</p>
<p>2. Find the LCM of 8 and 12.</p>	<p>4. Simplify the following expression.</p> $a^3 \times a^9 \div a^{-2}$

5. One of the angles in an isosceles triangle is 52° . What could the other two angles of the triangle be?
(Hint: there are two possible solutions!)

8. $\frac{3}{4}$ of an amount is £33. What is $4\frac{1}{2}$ times the amount?
Show your working out.

6. The mean of a set of 4 numbers is 7. Four of the numbers are 1, 5 and 11. What is the fifth number?

9. Share 560 in the ratio 4:2:1

7. A jacket is reduced by 70% in the sales. It originally cost £70. How much is it in the sale?

10. Write down the first 5 terms of the sequence
 $T(n) = 10n - 6$

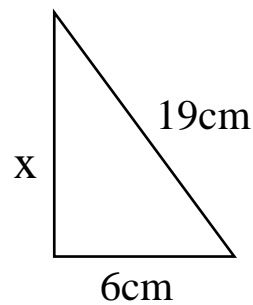
11. Solve the equation:

$$5(2x + 7) = 4x - 1$$

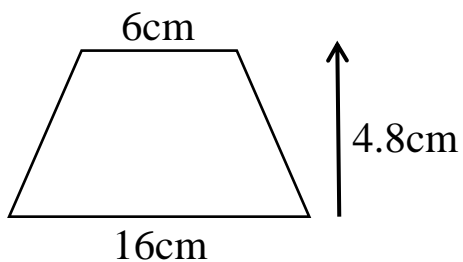
14. Round 72.53 to 1 significant figure.

12. Convert 31.5 litres into gallons.

15. Calculate the length of the side marked x . Show your working giving your answer to 1 decimal place.



13. Calculate the area of the shape:



16. Expand and simplify:

$$(m + 8)(m - 3)$$

17. Construct perpendicular bisector using compasses and a straight edge.



19. How many sides does a regular polygon with an exterior angle of 18° have?

18. A rectangle base 4.5cm and height 11.5cm is enlarged by a scale factor of 4. What is the perimeter of the new rectangle?

20. Write the equation of a line which is parallel to:

$$y = -3x + 4$$

Total:

