

Homework 17

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 68mm. Calculate its area. Give your answer correct to 2dp</p>	<p>3. Using a clear written method:</p> $\frac{4}{7} + \frac{3}{5}$
<p>2. Find the LCM of 9 and 24.</p>	<p>4. Simplify the following expression.</p> $\frac{6a^8 \times a^{-3}}{2a^2}$

5. One of the angles in an isosceles triangle is 48° . What could the other two angles of the triangle be?
(Hint: there are two possible solutions!)

8. $\frac{4}{11}$ of an amount is \$16. What is $5\frac{1}{2}$ times the amount? Show your working out.

6. The mean of a set of 6 numbers is 9. Five of the numbers are 1, 2, 3, 5 and 18. What is the sixth number?

9. Share £246 in the ratio 8:6:4.

7. A jacket is reduced by 30% in the sales. It originally cost £74. How much is it in the sale?

10. Write down the first 5 terms of the sequence
 $T(n) = -2n + 6$

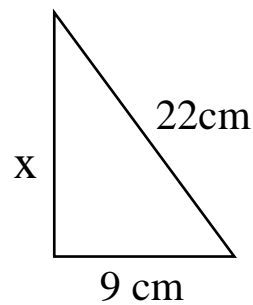
11. Solve the equation:

$$3(5x - 1) = 4(3x + 2) + 1$$

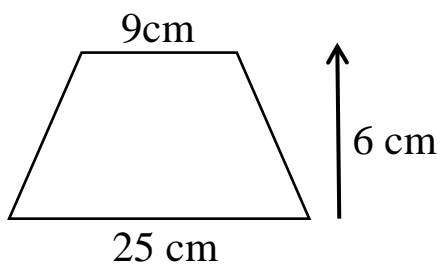
14. Round 439.614 to 2 significant figure.

12. Convert 63 gallons into litres.

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:

$$(x + 9)(2x - 4)$$

17. Construct a 60° angle using compasses and a straight edge.



19. What is a regular polygon with an exterior angle of 36° called?

18. A triangle base 4 cm and height 11 cm is enlarged by a scale factor of 2. What is the area of the new rectangle?

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

$$y = 8 - 3x$$

Total:

