

# Homework 11

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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:

1. The radius of a circle is 6.5 cm. Calculate its area. Give your answer correct to 2dp	3. Using a clear written method: Add three-quarters and five-eighths
2. Find the HCF of 28 and 126.	4. Simplify the following expression. $a^5 \times a^6 \times a$

<p>5. One of the angles in an isosceles triangle is <math>70^\circ</math>. What could the other two angles of the triangle be?</p>	<p>8. <math>\frac{3}{4}</math> of an amount is £45. What is <math>2\frac{1}{2}</math> times the amount?</p>
<p>6. The mean of a set of 5 numbers is 13. Four of the numbers are 6, 10, 11 and 15. What is the fifth number?</p>	<p>9. Share 480 in the ratio 2:3:5</p>
<p>7. A pair of jeans are reduced by 25% in the sales. They originally cost £35. How much are they in the sale?</p>	<p>10. Write down the first 5 terms of the sequence <math>T(n) = 3n - 4</math></p>

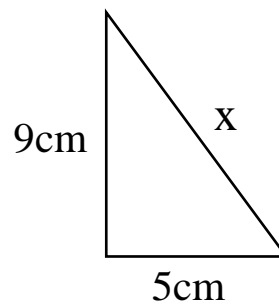
11. Solve the equation:

$$5x - 8 = 2(x + 6)$$

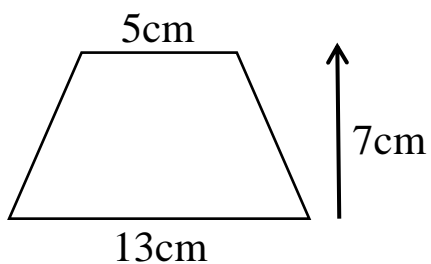
14. Round 5739 to 2 significant figures.

12. Convert 3 gallons into litres.

15. Calculate the length of the side marked  $x$ . Show your working.



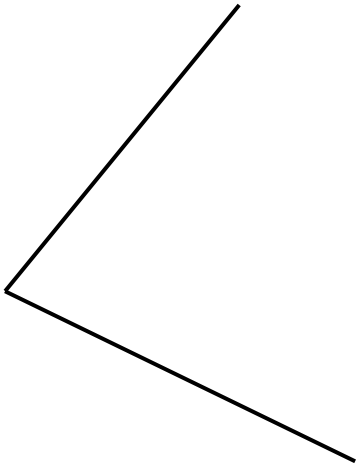
13. Calculate the area of the shape:



16. Expand and simplify:

$$(2m + 5)(m - 4)$$

17. Bisect the angle using compasses and a straight edge.



19. **NAME** the regular polygon with an exterior angle of  $36^\circ$

18. A rectangle base 38mm and height 27mm is enlarged by a scale factor of 3. What is the perimeter of the new rectangle?

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

$$y = 3x - 4$$

Total:

