Homework 12

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 diameter of a circle is 15cm. Calculate its area. Give your answer correct to 2dp	3. Using a clear written method: Add two-thirds to three-elevenths
2. Find the HCF of 32 and 56.	4. Simplify the following expression. $$a^7 \times a^3 \div a^5$$

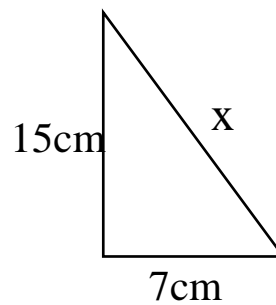|	
5. One of the angles in an isosceles triangle is 50°. What could the other two angles of the triangle be?	8. ¾ of an amount is 12kg. What is 4 ½ times the amount? Show your working out.
6. The mean of a set of 5 numbers is 23. Four of the numbers are 16, 19, 25 and 17. What is the fifth number?	9. Share 360 in the ratio 4:3:1
7. A shirt is reduced by 35% in the sales. It originally cost £27. How much is it in the sale?	10. Write down the first 5 terms of the sequence $T(n) = 2n + 5$

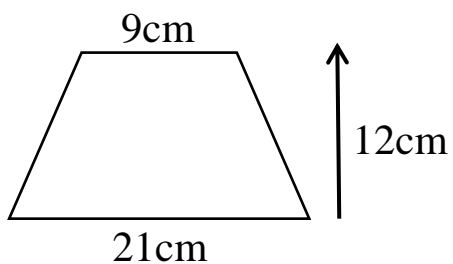|	
11. Solve the equation: $3(2x + 3) = 2x - 7$	14. Round 329.7689 to 3 significant figures.
12. Convert 18 gallons into litres.	15. Calculate the length of the side marked x. Show your working. 15cm x 7cm
13. Calculate the area of the shape: 9cm 12cm 21cm	16. Expand and simplify: $(h + 11)(h - 4)$

17. Construct an angle of 60° using compasses and a straight edge.	19. **NAME** the regular polygon with an exterior angle of 36°
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18. A rectangle base 12cm and height 23cm is enlarged by a scale factor of 2. What is the perimeter of the new rectangle?	20. Write the equation of a line which is parallel to: $y = 5x + 3$

Total: