Homework 16

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 48mm. Calculate its area. Give your answer correct to 2dp	3. Using a clear written method: $$\frac{3}{7} - \frac{2}{9}$$
2. Find the LCM of 8 and 20.	4. Simplify the following expression. $$\frac{a^6 \times a^4}{a^{-3}}$$

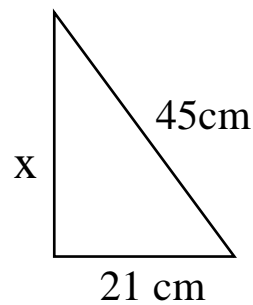|	
5. One of the angles in an isosceles triangle is 53°. What could the other two angles of the triangle be? (Hint: there are two possible solutions!)	8. $\frac{3}{7}$ of an amount is &21. What is 2¼ times the amount? Show your working out.
6. The mean of a set of 5 numbers is 21. Four of the numbers are 15, 19, 23 and 27. What is the fifth number?	9. Share $560 in the ratio 3:5:6.
7. A toaster is reduced by 20% in the sales. It originally cost £80. How much is it in the sale?	10. Write down the first 5 terms of the sequence T(n) = 3n - 6

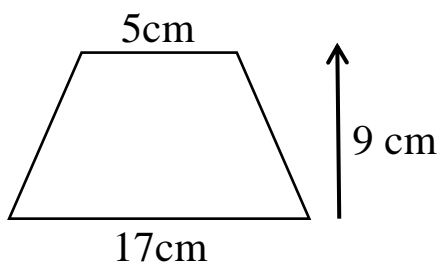|	
11. Solve the equation: $4(2x - 3) = 5x + 6$	14. Round 25.699 to 1 significant figure.
12. Convert 36 gallons into litres.	15. Calculate the length of the side marked x. Show your working giving your answer to 1 decimal place. 45cm x 21 cm
13. Calculate the area of the shape: 5cm 9 cm 17cm	16. Expand and simplify: $(x + 5)(2x + 3)$

17. Construct an equilateral triangle using compasses and a straight edge. _____	19. How many sides does a regular polygon with an exterior angle of 30° have?
18. A rectangle base 6 cm and height 10 cm is enlarged by a scale factor of 3. What is the area of the new rectangle?	20. Write the equation of a line which is parallel to: $y = 2x - 9$

Total: