Homework 13

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 21cm. Calculate its area. Give your answer correct to 2dp	3. Using a clear written method: Add four-fifths to six-sevenths.
2. Find the LCM of 9 and 14.	4. Simplify the following expression. $$a^{10} \times a^{-4} \div a^{3}$$

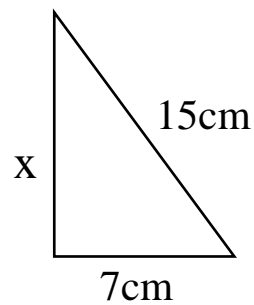|	
5. One of the angles in an isosceles triangle is 48°. What could the other two angles of the triangle be? (Hint: there are two possible solutions!)	8. ¾ of an amount is £21. What is 2½ times the amount? Show your working out.
6. The mean of a set of 5 numbers is 23. Four of the numbers are 16, 19, 25 and 17. What is the fifth number?	9. Share 240 in the ratio 2:3:1
7. A dress is reduced by 45% in the sales. It originally cost £120. How much is it in the sale?	10. Write down the first 5 terms of the sequence T(n) = 5n - 12

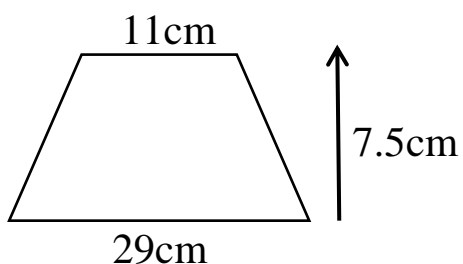|	
11. Solve the equation: $3(2x + 3) = 2x - 7$	14. Round 1075.8 to 1 significant figure.
12. Convert 54litres into gallons.	15. Calculate the length of the side marked x. Show your working. 15cm x 7cm
13. Calculate the area of the shape: 11cm 7.5cm 29cm	16. Expand and simplify: $(m + 7)(m - 5)$

17. Construct perpendicular bisector using compasses and a straight edge. _____	19. **NAME** the regular polygon with an exterior angle of 30°
18. A rectangle base 10cm and height 15cm is enlarged by a scale factor of 5. What is the perimeter of the new rectangle?	20. Write the equation of a line which is parallel to: y = 6x + 1

Total: