Homework 19

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 248mm. Calculate its area. Give your answer correct to 2dp	3. Using a clear written method: $$\frac{7}{9} - \frac{5}{8}$$
2. Find the LCM of 12 and 15.	4. Simplify the following expression. $$\frac{4c^8 \times 6a^3}{3a^2}$$

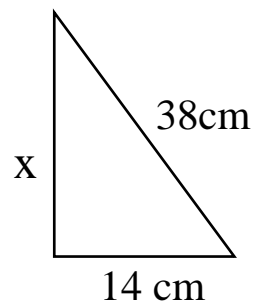|	
5. One of the angles in an isosceles triangle is 92°. What could the other two angles of the triangle be? (Hint: there are two possible solutions!)	8. $\frac{3}{8}$ of an amount is $18. What is 4 times the amount? Show your working out.
6. The mean of a set of 5 numbers is 4. Four of the numbers are 2, 3, 5 and 9. What is the fifth number?	9. Share £336 in the ratio 4:7:6.
7. A kettle is reduced by 22% in the sales. It originally cost £56. How much is it in the sale?	10. Write down the first 5 terms of the sequence $T(n) = 3n - 9$

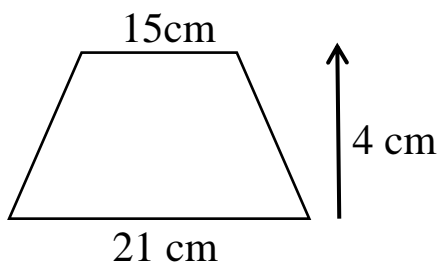|	
11. Solve the equation: $5(2x + 3) - 2(x - 4) = 79$	14. Round 1578 to 2 significant figures.
12. Convert 58 litres into pints.	15. Calculate the length of the side marked x. Show your working giving your answer to 1 decimal place. 38cm x 14 cm
13. Calculate the area of the shape: 15cm 4 cm 21 cm	16. Expand and simplify: $(2x - 3)(5x + 2)$

17. Construct a perpendicular from the point marked through the line using compasses and a straight edge. ——————X——————	19. What is a regular polygon with an exterior angle of 11.25° called? (You will need to look the name up)
18. A circle has a diameter of 8cm. It is enlarged by a scale factor of 2.5. What is the circumference of the new circle?	20. Write the equation of a line which is parallel to: $y = 3(4x - 7)$

Total: