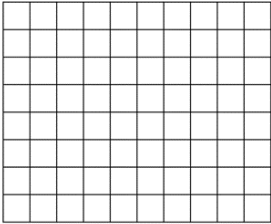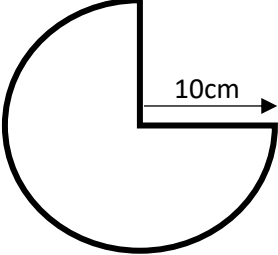YEAR 11 HOMEWORK –2S
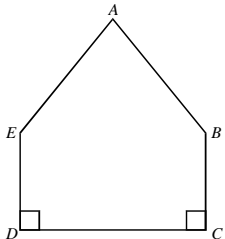
Complete the questions in each box. Make sure that you show all of your workings

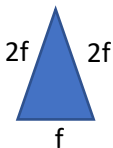| 1. Change 251 cm into metres.	2. $2 - 7 \times 10$
3. Solve $\dfrac{y}{3} = 9.6$	4. Here are four numbers. -9 -2 2 9 Write one number in each box to make a correct calculation: ☐ + ☐ = -11

5. Here are the first four terms of a number sequence. 2,5,11,23 The rule to continue the sequence is "multiply the previous term by 2 and then add 1". **Work out the 7th term of this sequence**	6. There are 3 rods of length: **2a-1, 2a** and 2**a + 4** The total length of the 3 rods is L cm Find a formula for L. Write it in its simplest form.
7. The length of a rectangle is three times as long as the width of the rectangle. The area of the rectangle is 27units^2. Draw the rectangle on the grid. 	8. Find the Area: 10cm
9. Jake played a game 20 times. The stem and leaf diagram shows his scores | 0	9
1	2 3 3 4 5
2	5 6 6 6 6 7
3	1 3 4 6 8
4	0 2 9 | Key: 1 | 2 represents 12 points Find the median score	10. There are 30 children in a nursery school. At least 1 adult is needed for every 11 children in the nursery. Work out the least number of adults needed in the nursery.

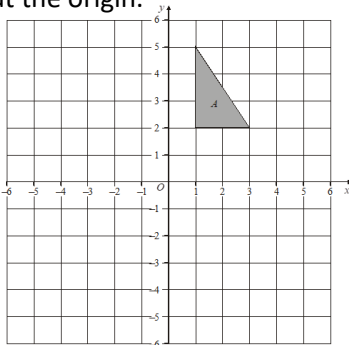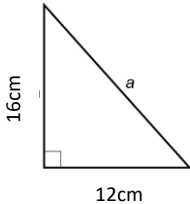|	
11. Simplify: **6k + 9k – 4k -2p +5p**	12. Use the formula $a = 5b - 2c$ to work out a when $b = 3$ and $c = -4$
13. Name the 5 side shape *A* *E* *B* *D* *C*	14. Find f if the perimeter is 70cm 2f 2f f
15. Complete this table of values for $y = 3x + 1$ <table><tr><td>x</td><td>−1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr><tr><td>y</td><td></td><td></td><td></td><td></td><td></td></tr></table>	16. Factorise: 18p + 12

17. Draw the new position of triangle A after a rotation of 90° anticlockwise about the origin.	18. A pack of 66 rulers costs £2.52. In a different shop, a pack of 33 rulers costs £1.65 - Which pack is better value?
19. Use Pythagoras theorem to find the value of a 16cm *a* 12cm	20. The population of an island increases by 8 percent from 350. Calculate the new population

WWW	
EBI 1	
EBI 2	