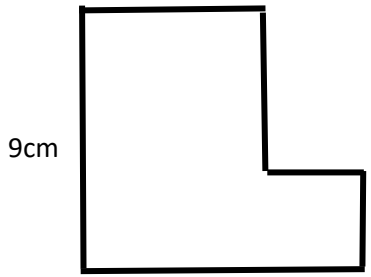
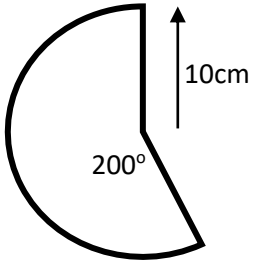
YEAR 10 HOMEWORK – 3R

Complete the questions in each box. Make sure that you show all of your workings

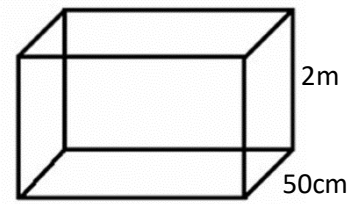
1.Find the perimeter:




2. Find the Area:




3. Find the missing side length if the volume is $6m^3$:




____m

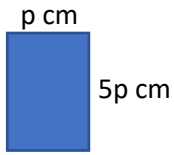
4. Simplify:

**$6k^2 + 5k – 4k - 2p + 8p$**

5. Simplify $12p^2 \times 2p$

6. Simplify $8X^3 \div X$

7. Find p if the area is 50cm (assume p is positive)




8. Expand the brackets and simplify:

2p(4f - 6f) + 23

9. Factorise:

$9p^2q + 12pq$

10. Find the value of P when **a = 5** and **b = 4 and c =2:**

$P = b^2 – 4ac$

11. Find the probability of a purple ball being pulled out of a bag if these are the probabilities of the other colours

| | |
|---|---|
| Blue 0.09 | Green 0.18 |
| Red 0.243 | Purple = |

12. At a meeting there are 50 teachers who travel by car or train only. 32 teach geography, the rest teach history.
14 history teachers travel by car
8 geography teachers travel by train
Identify row and column headings and draw a 2 way table to represent this data.

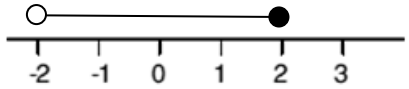
13. 70 people take part in an attempt to qualify for a golf tournament. Before the start, they were all asked if they thought they would qualify, and exactly half said they thought they would. Of those who thought they would qualify, 15 qualified. A total of 38 people qualified. Complete a frequency tree

14. Find the mean, median mode and range

**78 82 74 45 68 75 93 54 68 70 48 66 62 51 77**

15. 50 people are asked about what food they like. 42 like yoghurt, 30 like cereal, 3 like neither. Draw a Venn diagram to show this information.

16. Write the inequality shown on the number line




17. Find the **median** and the **quartiles** from the list below.

Minutes per day spent playing computer games:

**40 26 60 64 33 39 28 46 47 51 55**

18. Estimate the solution:

47 x 123 x 87

19. Round:

8.051 (2sf)

20. Calculate $2\frac{1}{3} \times \frac{1}{2}$

| | |
|---|---|
| WWW | |
| EBI 1 | |
| EBI 2 | |