1. (a) Write 0.000738 in standard form.

Answer …… [1]

(b) Write 5.84×10^5 as an ordinary number.

Answer …… [1]

---

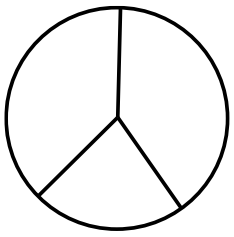
2. (a) Express 7698 and 50.28 correct to two significant figures.

Answer …… [1]

(b) Use your answers to part (a) to estimate the value of $7698 \div 50.28$

Answer …… [1]

3.



For the figure above, write down

(a) the number of lines of symmetry,

Answer …… [1]

(b) the order of rotational symmetry.

Answer …… [1]

4. Solve the simultaneous equations.

$$3x - y = 7$$

$$x - y = 4$$

Answer x = ... *y* = ... [3]

---

5. A formula containing x and y is given by $2y = 3x + 7$.

(a) Find y when x = 1.2

Answer y = ... [2]

(b) Rearrange the formula to make x the subject

Answer x = ... [2]

6. (a) Factorise $3x + 12xy$.

Answer …… [1]

(b) Factorise $x^2 - 8x + 12$

Answer …… [2]

---

7. (a) Simplify $\frac{18x^2}{7} \div \frac{3x}{14}$

Answer …… [2]

(b) Simplify $-8x + 12y + 5x - 6y$

Answer …… [1]

8. The exchange rate between Singapore dollars (S$) and Malaysian Ringgit (MYR) was SGD$3 = 9.305 MYR.

(a) Convert SGD $200 to Malaysia Ringgit.

Answer ..... [2]

(b) Ahmad decides to buy a pair of shoes for 109.40 MYR.

Calculate the price of shoes in Singapore dollars.

Answer ..... [2]

---

9. Darren joined a triathlon cycled 40 km, swam 1500m and ran 10 km

(a) Find the ratio of distance he cycled to the distance he ran.

Answer ..... [2]

(b) If Darren completed the race in 155 minutes, evaluate Darren's speed in kilometres per hour.

Answer ..... [2]

10. The ratio of apples to oranges is 3 : 1. The ratio of oranges to mangoes is 2 : 5. Find the ratio of apples to oranges to mangoes.

Answer ……. [2]

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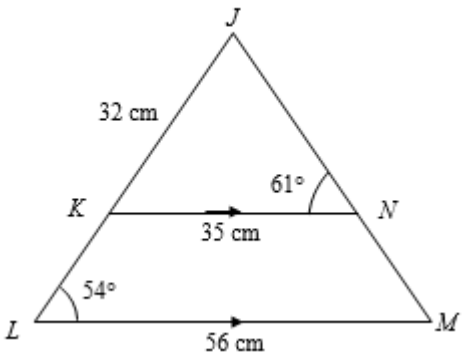
11. The diagram below is made up of a pair of parallel lines *KN* and *LM*.



JKL and *JNM* are straight lines. Angle *KLM* = 54° and angle *JNK* = 61°.

(a) Calculate the angle *NML*.

Answer angle NML = ……. [1]

(b) Calculate the angle *LKN*.

Answer angle LKN = ……. [1]

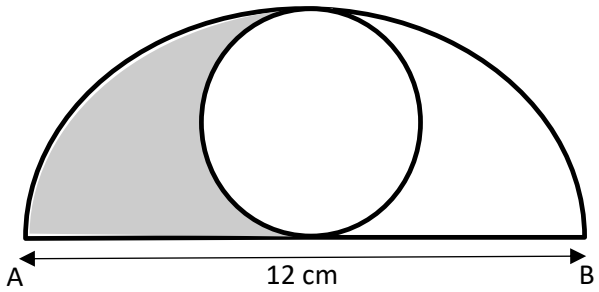
(c) Given that triangles *JKN* and *JLM* are similar.

Find the length of *JL*.

Answer ..... [2]

---

12. The circle is drawn inside a semicircle, as shown in the diagram.



The distance *AB* is 12 centimetres.
(a) Find the shaded area.

Answer ..... [2]

(b) Find the perimeter of the shaded area.

Answer ..... [2]

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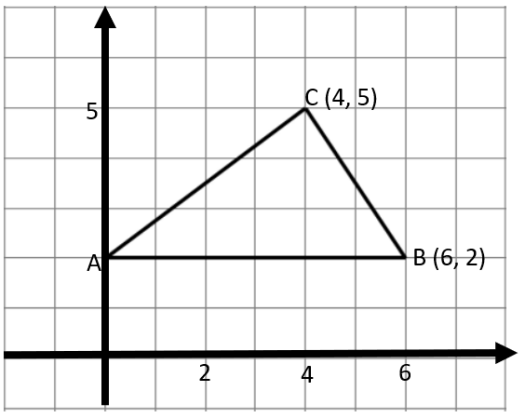
13. B is the point (6, 2) and C is the point (4, 5)



(a) Write down the coordinates of A

Answer (....., ...) [1]

(b) Find the gradient of the line BC.

Answer ..... [2]

(c) Find the area of triangle *ABC*

Answer ..... units^2 [1]

14. *ABC* is a triangle where *AB* = 8 cm, *BC* = 6 cm and *AC* = 7 cm.

(a) In the answer space below, construct triangle *ABC*. [2]

(b) Using your answer in **(a)**, construct the angle bisector of *ABC*. [1]

Answer (a) and (b)

15. Diana recorded her expenses for four weeks in March in the table below.

Monthly Expenses	Cost
Groceries	$360.80
Utilities	$275.40
Transport	$50 per week
Insurance	$360
Shopping	$305.20
Savings	20% of salary

(a) Diana earns $3000 in January.

Calculate her savings for the month of March.

Answer ..... [1]

(b) Diana wishes to go for a staycation for $400 at the end of March.

Should she go for it? Explain your answer with clear working.

Answer: Diana .....go for the staycation because

.....

..... [3]

(c) Diana's salary rises to $3350 a month later.

Calculate the percentage increase in her salary.

Answer ..... [2]