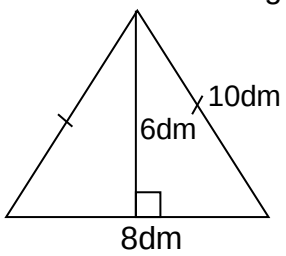
SECTION A: (40 MARKS)

1. Multiply: 22 x 4

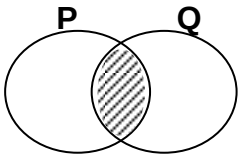
2. Write 54 in Roman numerals.

3. Find the area of the figure below.



4. What is the place value of 4 in the figure 4.37?

5. In the venn diagram below describe the shaded part.



6. What number has been prime factorized to get $\{2_1, 2_2, 3_1, 3_2\}$?

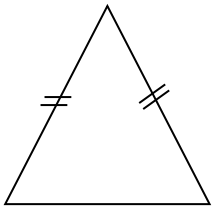
7. Work out: $\frac{1}{2} + \frac{1}{3}$

8. A fountain pen costs Shs 6000. Jaliah bought 5 fountain pens. How much money did she pay?

9. Work out: $^{-}7 + {}^{+}5$

10. Given that  represents 10 trees. How many trees are represented by  ?

11. How many lines of folding symmetry does the figure below have?



12. Muwonge's cow produced 45 litres of milk in one week. Muwonge sold all the milk in ½ litre bottles. How many ½ litre bottles of milk did he sell?

13. Write in figures: Twelve thousand four hundred two.

14. Divide: 1818 by 3.

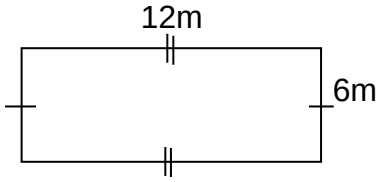
15. Change $4\frac{1}{2}$ kg to grams.

16. Find the average of 70, 80, 90, 60.

17. Solve for x: $2x + 4 = 12$

18. Use a protractor to draw an angle of 75^0.

19. Find the total distance around the figure below.



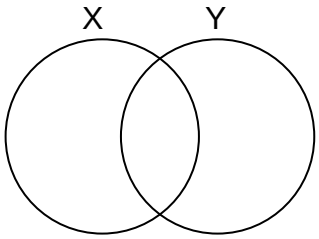
20. Work out:

HR	MIN
8	30
- 4	40

SECTION B (60 marks)

21. Given that set X = {a, b, c, d, e, f}, Y = {a, e, i, o, u}.

(a) Show the above information on the venn diagram below. *(2 marks)*



(b) Find: (i) $n(X \cup Y)$ *(1 mark each)*

(ii) $Y - X$

(iii) $X \cap Y$

22. In a farm of 120 animals, ⅔ are cows and the rest are sheep.

(a) Find the fraction of sheep on the farm. *(1 mark)*

(b) How many cows are there on the farm? *(2 marks)*

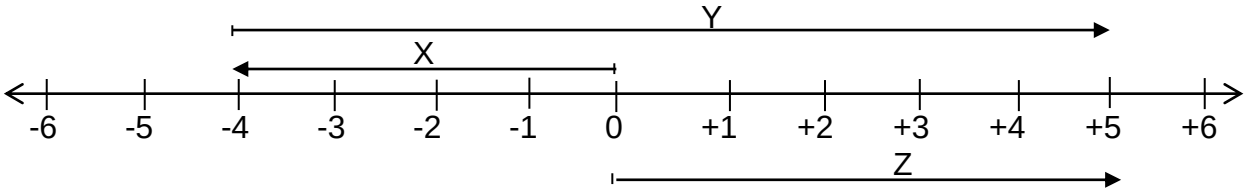
(c) How many more cows are there than sheep? *(2 marks)*

23. Mary went to a shop and bought the following items.
- 2 kg of sugar at sh. 2800 per kilogram.
- 3 bars of soap at sh. 6000.
- 1 ½ litres of paraffin at sh. 2900 per litre.
- transport sh. 3000

(a) How much money did she spend altogether? *(3 marks)*

(b) If she had sh. 20000 before shopping, what was the balance? *(2 marks)*

24. Study the number line below and answer the questions that follow.



(a) Name the integers represented by:- *(1 mark each)*

(i) Arrow X _____

(ii) Arrow Y _____

(iii) Arrow Z _____

(b) Write the mathematical statement for the above number line. *(2 marks)*

25. The table above shows marks obtained by a pupil in end of year exams. Use it to answer questions that follow.

ENGLISH	MATHS	SCIENCE	SST	COMPUTER
65	90	70	70	55

(a) Find the median mark. *(1 mark)*

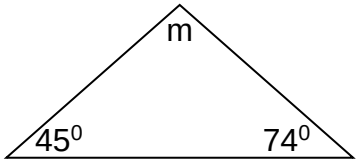
(b) Find the range. *(1 mark)*

(c) What is the modal mark? *(1 mark)*

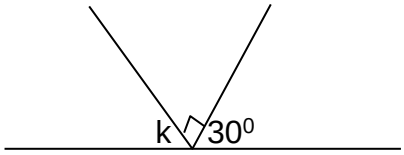
(d) Calculate the average mark. *(2 marks)*

26. Calculate the values of unknown angles. *(2 marks each)*

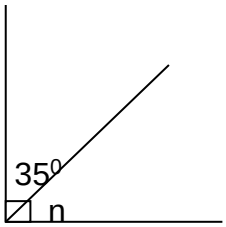
(a)



(b)



(c)



27. (a) A mathematics lesson of 40 minutes started at 9:50 a.m. When did it end? *(2 marks)*

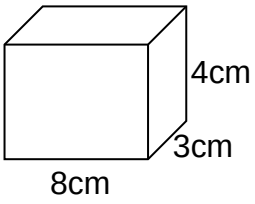
(b) A taxi was moving at a speed of 80km per hr. It moved for 3 hours. What distance did it cover? *(2 marks)*

28. (a) Arrange $\frac{1}{2}$, $\frac{3}{4}$, $\frac{5}{6}$ in descending order. *(2 marks)*

(b) What is the reciprocal of 1 ½? *(3 marks)*

29. Study the figure below and find;

(a) its volume. *(2 marks)*



(b) the number of; *(1 mark each)*

(i) edges

(ii) faces

(iii) vertices

30. Using a ruler and a pair of compasses only, construct a regular hexagon in a circle of radius 4cm. (4 marks)

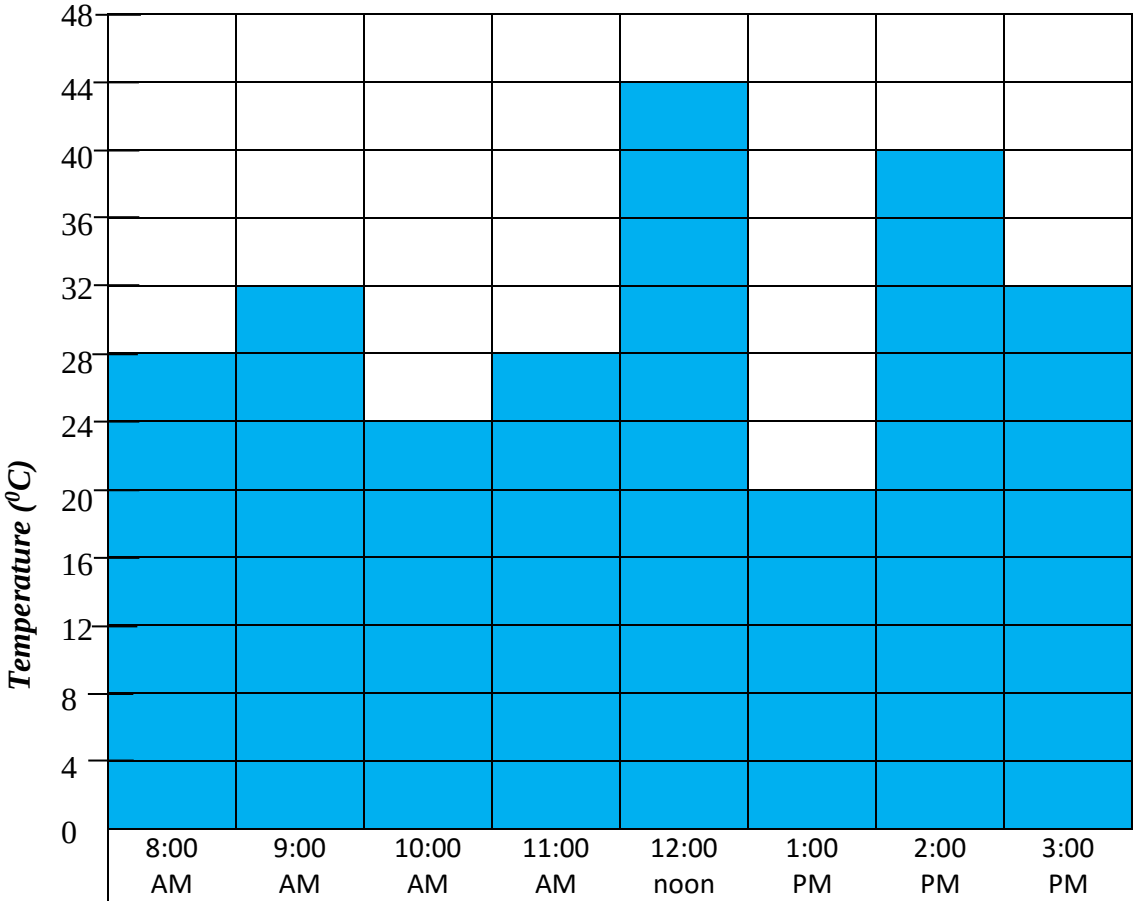
31. (a) Solve for the unknown in; *(2 marks each)*

(i) $2x - 17 = 19$

(ii) $\frac{y}{3} = 7$

(b) If $a = 2$, $b = 5$ and $c = 4$ find the value of $3c + a - b$.

32. *The graph below shows the temperature record during a day in degrees celsius. Use it to answer questions that follow.* *(1 mark each)*



(a) What was the highest temperature that was recorded?

(b) At what time was the temperature lowest?

(c) What was the temperature at 9:00 a.m.?

(d) Find the range.

(e) At what time was the temperature 24^0C?

Good Luck