SECTION A (40 MARKS)
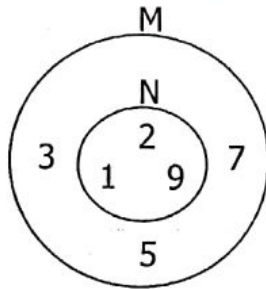
1. Workout: 54 + 421

2. Write in words. 24.6

3. Solve for x: $4x - 1 = 1$

4. Study the Venn diagram below to find n(M).

M
N
2
3   1   9   7
5

5. What integer is 4 steps to the right of -3?

6. The square root of a number is 0.2. Find the number.

7. A Gaaga bus left Kampala for Juba at 5:30am. If it took 15 hours to reach Juba, at what time did it reach Juba in 24 hour clock?

8. In the space below construct an angle of 135^0.

9. Divide 1616 by 4.

10. Find the angle made by a minute hand from 8:10am to 8:40am.

11. The number of pupils in a class increased from 200 pupils to 250 pupils. In what ratio did the pupils increase?

12. After covering 30km, Junju had $\frac{5}{8}$ of the journey to cover. How long was the whole journey?

13. Given that a = 3 and b = 2a. Find the value of **a + b²**.

14. Write $(3 \times 10^3) + (4 \times 10^1) + (8 \times 10^{-2})$ as a single numeral.

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15. If the supplement of $(2x + 80)^0$ is 3x, find the value of x.

16. Find the greatest common factor (G.C.F) of 18 and 12.

17. Given that represents 27 pencils, how many pencils are represented below?

18. The number of pupils, men and women on a meeting was in the ratio 2:3:4. If there were 140 adults, how many pupils were there in the meeting?

19. A 3 litre container loses 200mls of water per minute. How long will it take for it to be completely empty?

20. Name the polygon whose interior angle is 120^0.

SECTION B (60 MARKS)

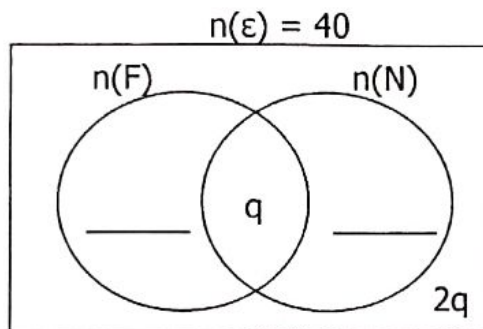21. The table below shows how Epenu spends his day.

Activity	Sleeping	Reading	Recreation
Percentage	40%	X	10%

(a) Find the value of x in percentage. **(2 marks)**

(b) How many hours does Epenu spend on recreation? **(2 marks)**

(c)   Express his sleeping hours in degrees.   **(1 mark)**

22.   In a team of 40 players, 20 play football (F) only. 16 pupils play Netball (N) only, q players play football and netball while 2q players play neither of the two games.

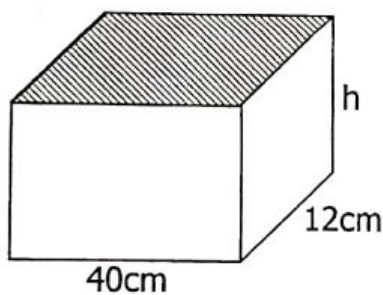(a)   Represent the given information above in the Venn diagram below.   **(2 marks)**

$$n(\varepsilon) = 40$$

n(F)   n(N)

q

2q

(b)   How many players do not play Netball?   **(3 marks)**

23.   (a)   Express 3.21×10^3 in an ordinary form.   **(2 marks)**

(b)   Fractorise completely. $8ab - 12b$ **(2 marks)**

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24. Kasubo bought a novel and sold it to Musana at a loss of 20%. Musana sold it to Mutima at sh. 19,200 making a profit of 20%. How many did Kasubo buy the novel?

(4 marks)

25. The tank below holds 4.8 litres of milk when full. Study it carefully and answer the questions that follow.
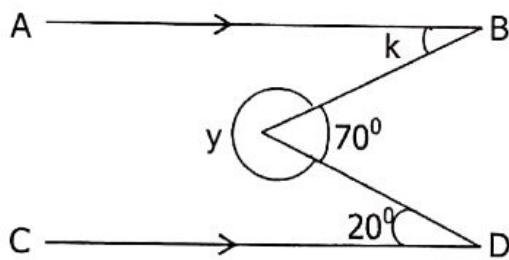

(a) Workout the value of h. **(3 marks)**

(b) If $\frac{3}{5}$ of the milk is sold, find the new level of milk in the tank. **(2 marks)**
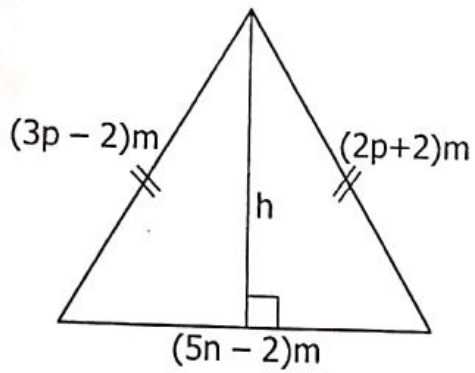
26. The weight ~~age~~ of 7 boys in a class is 30 kilograms. When their teacher joins the group, the average becomes 35 kilograms. What is the weight of the teacher?

(4 marks)

27. In the figure below, line AB is parallel to line CD. Study and use it to answer the questions that follow.

(a) Find the size of angle y in degrees. **(2 marks)**

(b) Find the size of angle k in degrees. **(3 marks)**

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28. The figure below is a triangle PQR. Use it to answer the questions that follow.

(a) Find the value of P. **(2 marks)**

(b) Workout the value of h. **(2 marks)**

(c) Calculate the area of the figure above. **(2 marks)**

29. Three pedestrians, Ali, Suzan and Patel have strides of 20cm, 30cm and 50cm respectively. They walked from point A and reached at the same time to point B.

(a) Find the distance between point A and point B. **(4 marks)**

(b) How many strides were made by Suzan between point A and point B? **(2 marks)**

30. On a farm there are 3 more goats than turkeys.

(a) If the total number of legs for all the animals is 30 legs, how many goats are on the farm? **(3 marks)**

(b) If each turkey costs sh. 100,000, how much did he collect from the sale of turkeys? **(2 marks)**

31. A driver left town K and from to town M a distance of 300m on a bearing of 150⁰. He changed direction and drove to town N on bearing of 240⁰ covering a distance of 400m.

(a) Draw a sketch drawing showing the driver's route. **(1 mark)**

(b) Construct an accurate drawing for the driver's journey using a scale of 1cm – 100m.

(3 marks)

(c) Find the shortest distance between town K and town N. **(1 mark)**

32. Study the table below and answer the questions that follow.

Mark	Frequency	Total
30	3	90
_____	5	200
70	_____	140

(a) Complete the table above correctly.   (2 marks)

(b) How many pupils did the test?   (1 mark)

(c) Calculate the average mark.   (2 marks)

END

GOOD LUCK