

SECTION A : 40 MARKS

Answer **all** questions in this section.

Questions 1 to 20 carry **two** marks each.

1. Divide: 21 by 3

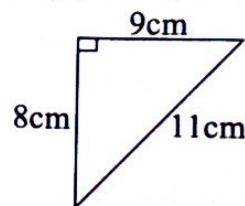
2. Write "Forty nine" in Roman numerals.

3. Given that: $F_M = \{2_1, 2_2, 3_1\}$
 $F_P = \{2_1, 3_1, 5_1\}$
 Find the Lowest Common Multiple (LCM) of M and P.

4. The temperature of a town for five weeks was recorded as below;
 22° , 25°C , 30°C , 25°C and 38°C
 Work out the weekly average temperature.

5. Simplify: 13 hens — 10 hens + a hen.

6. Calculate the area of the triangle below.

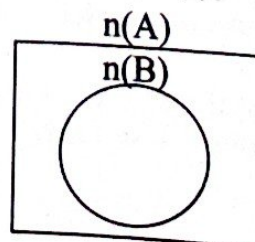


7. Work out: $102_{\text{five}} + 44_{\text{five}}$

8. John had 2 sackets of salt weighing 500gms each. Express the mass of salt in kilograms.

9. A local TV show started at 9:15a.m and ended at 10:00a.m. How long was the local TV show?

10. In the Venn diagram below, shade $n(A \cup B)$.



SECTION B : 60 MARKS

Answer **all** questions in this section.

Marks for each question are indicated in the brackets.

21. Complete Joan's shopping bill table below correctly. (5 marks)

S/No	ITEM	QUANTITY	UNIT COST	AMOUNT
(i)	Pens	$\frac{1}{2}$ dozen	Shs. 800 per pen	Shs. _____
(ii)	Books	2 dozens	Shs. _____ a book	Shs. 36,000
(iii)	Soap	_____ bars	Shs. 3000@ bar	Shs. 15,000
(iv)	Total expenditure			Shs. _____

22. (a) Arrange $\frac{1}{2}$, $\frac{1}{5}$ and $\frac{1}{3}$ in ascending order. (2 marks)

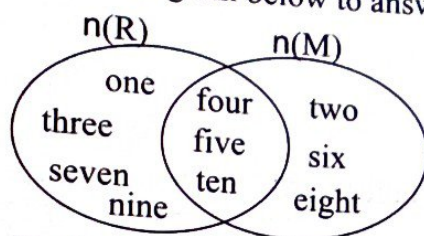
- (b) In a class there are 160 pupils.
(i) If $\frac{1}{4}$ of them are girls, find the fraction of boys (2 marks)
(ii) How many boys are in the class? (2 marks)

23. Complete the 3 by 3 magic puzzle below to find the values of a, b, c, d, and e.

(6 marks)

a	b	c
d	e	4
3	10	5

24. Use the Venn diagram below to answer the questions that follow.



(a) Find:

(i) $n(R)$

(1 mark)

(ii) $n(R \cup M)$

(1 mark)

(b) List down members of;

(i) Set M =

(1 mark)

(ii) $R \cap M$

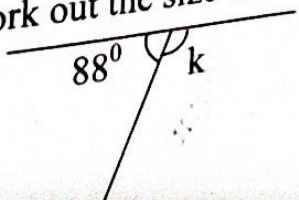
(1 mark)

25. (a) Name the type of angles drawn below.

<p>(i)</p> <p>..... (1 mark)</p>	<p>(ii)</p> <p>..... (1 mark)</p>	<p>(iii)</p> <p>..... (1 mark)</p>
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- (b) Work out the size of angle marked k in degrees.

(2 marks)



26. A teacher left home at 7:15a.m and took $1\frac{1}{2}$ hours travelling at a speed of 80km/hr to arrive school.

(a) At what time did she arrive school?
(2 marks)

(b) What distance did she cover from home to school? (2 marks)

27. A family uses 5 litres of milk everyday.

(a) Express the number of litres used in millilitres. (2 marks)

(b) If a litre of milk costs Shs. 1500, how much does the family spend on milk for a week? (2 marks)

28. (a) Work out: $\frac{1}{2} + \frac{1}{3} + \frac{1}{6}$ (2 marks) (b) Simplify: $1\frac{1}{4} - \frac{2}{3}$ (2 marks)

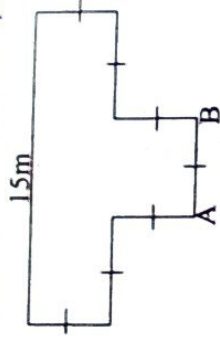
29. (a) Solve for \square : $\square + 9 = 13$

(2 marks)

- (b) Sarah has three times as many books as Joan. If they both have 40 books, find Joan's books. (2 marks)

30. Using a ruler, a pencil and a pair of compasses only, construct a regular hexagon of radius 4cm. (5 marks)

31. The figure below shows Tom's piece of land.



- (a) Find the length AB in metres.
(1 mark)

- (b) Work out the distance round the piece of land.
(2 marks)

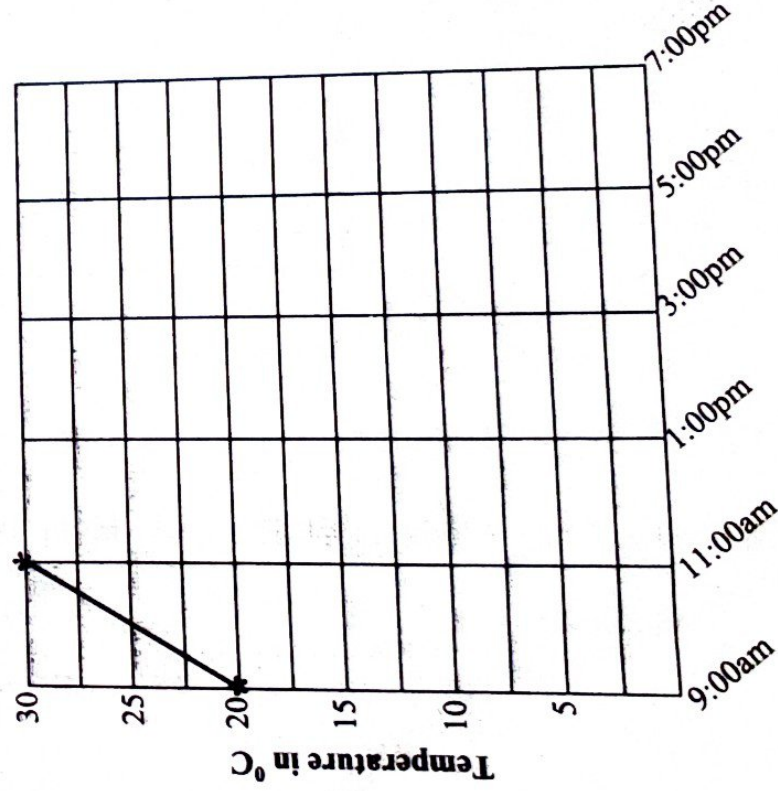
- (c) Calculate the area covered by Tom's land.
(3 marks)

32. The table below shows the temperature of a town recorded at a 2-hour interval for a day.

Time	9:00am	11:00am	1:00pm	3:00pm	5:00pm	7:00pm
Temperature	20°C	30°C	25°C	15°C	30°C	20°C

Draw a line temperature graph for the recorded information above.

(5 marks)



Time in hours

END