

CLASS : P.7
SUBJECT : MATHEMATICS
TIME ALLOWED : 2 HOURS 30 MINUTES

Name _____

Index no.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Read the following instructions carefully

1. This paper has two Sections: A and B.
2. Section A has 20 answer questions (40 marks)
3. Section B has 12 questions (60 marks)
4. Answer ALL questions. Answers to both sections must be written in the spaces provided.
5. All answers must be written using blue ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the box indicated for examiner's use only.

For Examiner's use only	
A	
B	
TOTAL	

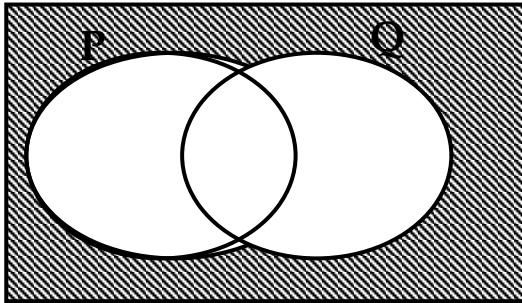
SECTION A:

1. *Work out:* $13 + 64$

2. *Write 2020 in words.*

3. *Work out:* $110_{\text{two}} + 111_{\text{two}}$

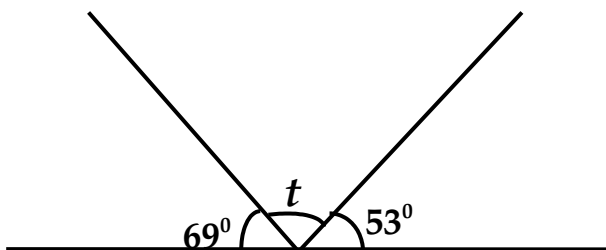
4. *Describe the shaded region in the venn diagram below.*



5. *Find the sum of the next two missing numbers*

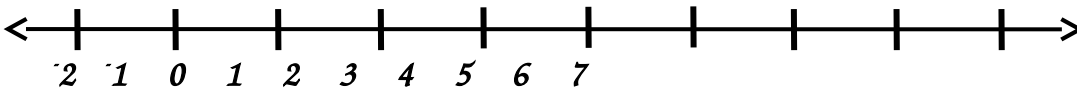
$1, 3, 6, 10, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$

6. *Find the size of angle marked **t** in the figure below.*



7. *In a class of 60 pupils, 12 are girls and the rest are boys. Express the number of boys as a percentage of the whole class.*
8. *A man rested from 1:00pm to 3:00pm on the same day. For how long did he rest?*
9. *Simplify: $2b + 6y + b - y$*
10. *Find the circumference of a circle whose radius is 14cm. (Take $\Pi = \text{---}$)*
11. *Express 36km/hr in metres per second.*

12. Workout $+5 + -2$ using the number line below.



13. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 150°

14. The distance from town to Alex's home is 4.6km. Express this distance in metres.

15. Ali bought 4 exercise books at shs.8000. How many similar exercise books can he buy with shs. 16000?

16. A dice whose faces are numbered 1 to 6 is tossed once. What is the probability that an even number shows on top?

17. Simplify: $— - — + —$

18. A trader bought 3000 grammes of salt. How many kilogrammes did he buy?

19. Uganda got its independence in 1962. Express that year in Roman numerals.

20. Set \mathcal{A} contains 32 subsets. How many elements does set \mathcal{A} have?

SECTION B:

21. The sum of three consecutive even numbers is 42.

a) Find the three even numbers.

(2 marks)

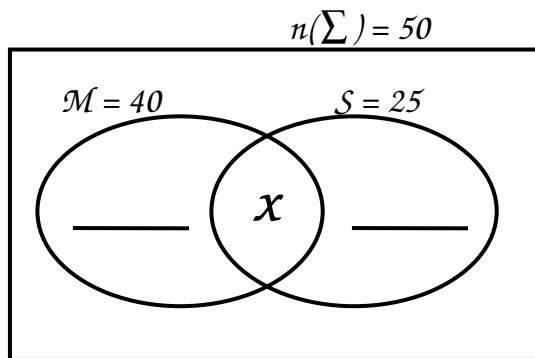
b) Find the range of the numbers.

(2 marks)

22. In a group of 50 girls, 40 like Mathematics (\mathcal{M}), 25 like Science (\mathcal{S}), x girls like both subjects and 2 do not like any of the two subjects.

a) Represent the above information on the venn diagram below.

(2 marks)



b) How many girls like both Mathematics and Science?

(2 marks)

c) Find the number of girls that like Mathematics only.

(2 marks)

23. a) Work out: $\frac{0.72 \times 0.08}{0.9 \times 0.4}$

(2 marks)

b) Change $0.2727 \dots$ to a common fraction.

(2 marks)

24. The table below shows the marks scored in the test by pupils in a class. Use it to answer questions that follow.

Marks scored	70	40	30	50
No. of pupils	3	4	2	1

a) How many pupils did the test?

(2 marks)

b) Find the modal mark.

(2 marks)

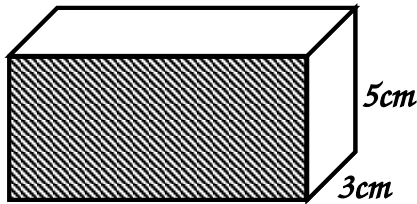
c) Calculate the mean mark for all the pupils in the class.

(3 marks)

25. a) Using a ruler, pencil and a pair of compasses only, construct a triangle XYZ such that length $XY = 6\text{cm}$, angle $ZXY = 60^\circ$ and $ZYX = 45^\circ$. L
(4 marks)

- b) measure angle XZY (1 mark)
-

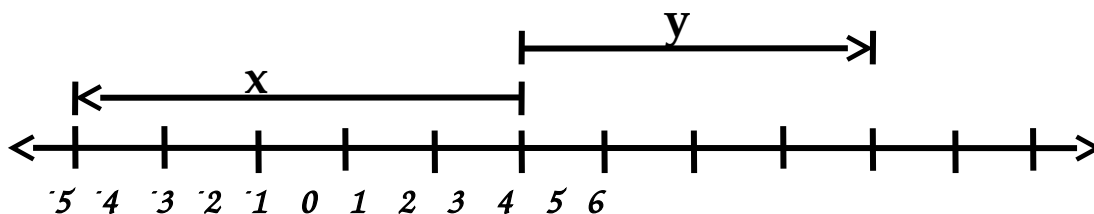
26. Study the figure below and answer the questions that follow.



- a) Find $\frac{10\text{cm}}{2}$ of the shaded part. (2 marks)

- b) Calculate the volume of the above figure. (2 marks)

27. Study the number line and use it to answer the questions that follow.



- a) Name the integers represented by the arrows. (1 mark @)

$x =$ _____ $y =$ _____ $z =$ _____

b) Write down a subtraction statement for the above numberline.

28. Work out: (2 marks)

a) 302_{five}

-141_{five}

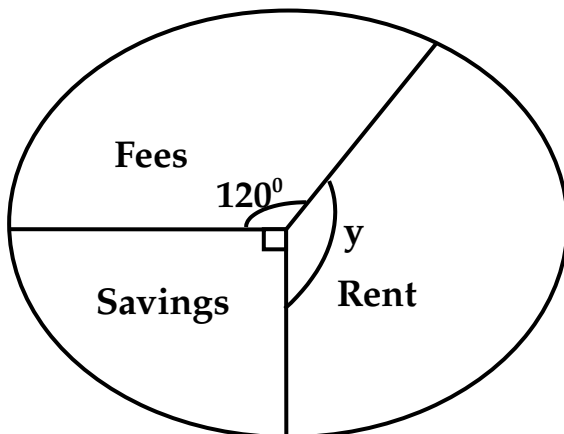
b) Find the value of n : $31_n = 13_{\text{ten}}$ (2 marks)

29. a) Solve for t . (2 marks)

$$5t - 2(t + 1) = 10$$

b) Solve the inequality. $4m > 12$ (2 marks)

30. The pie-chart below represents the man's monthly expenditure of shs. 720,000.



a) Find the value of **Y**.

(2 marks)

b) How much more money is spent on fees than what is saved? (3 marks)

31. Work out:

(6 marks)

$$\begin{array}{r} 4\ 8\ 9\ 9 \\ +\ 2\ 1\ 0\ 1 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3\ 2\ 0\ 4 \\ -\ 1\ 4\ 8\ 2 \\ \hline \\ \hline \end{array}$$

$$c)\ 9\ 3636$$



32. George went to the super market and bought the following items as shown in the table below.

a) Complete the table.

(5 marks)

Item	Quantity	Unit cost	Amount
Eggs	15 eggs	Shs. 300	Shs. _____
Meat	_____ kgs	Shs. 6000	Shs. 15,000
Cooking oil	— litre	Shs _____ per litre	Shs, 2000
Sugar	1— kg	Shs. 3000	Shs. _____
Total Expenditure			Shs. _____

- b) If George went to the supermarket with a fifty thousand shilling note, calculate his change.
(2 marks)

******END******