



CORNERSTONE JUNIOR SCHOOL MUKONO

PRIMARY SEVEN EXAMINATIONS TERM III 2022

PRE-PLE PAPER SET TWO

MATHEMATICS

Time allowed: 2 hours 30 minutes

Name: _____ Stream: _____

Index Number: _____

Read the following instructions carefully:

1. This paper has **two** sections: **A** and **B**.
2. All the working for both Sections A and B must be shown in the spaces provided.
3. All working must be done using a blue or black ball-point pen or ink. Any work in pencil other than graphs, pictures and diagrams will not be marked.
4. No calculators are allowed in the examination room.
5. Unnecessary changes of work may lead to loss of marks.
6. Any handwriting that cannot easily be read may lead to loss of marks
7. Do not fill anything in the boxes indicated:

FOR EXAMINER'S USE ONLY		
Qn. No	MARK	EXR'S NO
1 – 5		
6 – 10		
11 - 15		
16 – 20		
21 - 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 - 32		
Total		

“For Examiners’ Use Only” and those inside the question paper.

SECTION A (40 MARKS)

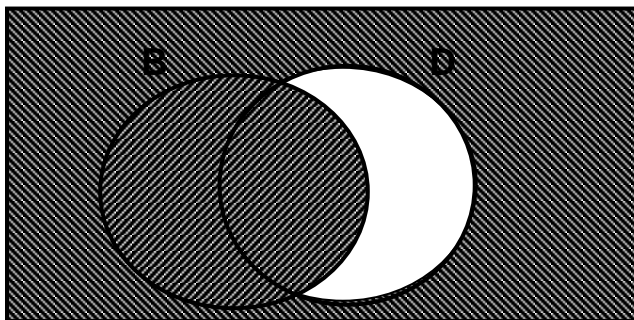
1. Workout :

$$\begin{array}{r} 3 \quad 2 \\ + 2 \quad 3 \\ \hline \end{array}$$


2. Given that $P = \{\text{all factors of } 24\}$. Find $n(P)$.

3. Simplify: $5m^2 + 3k - m + k$.

4. Describe the shaded region in the Venn diagram below.

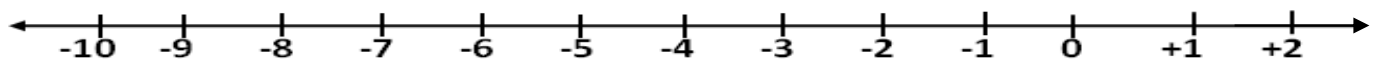


5. What number has been expanded to give;
 $(2 \times 10^4) + (1 \times 10^3) + (4 \times 10^2) + (8 \times 10^0) + (4 \times 10^{-2})$?
6. Find the next number in the sequence below:
 $^{-}30, \ ^{-}28, \ ^{-}25, \ ^{-}20, \ ^{-}13, \ \underline{\hspace{1cm}}$.
7. A crusade started at 9:15p.m and ended at 2:30am. For how long was the crusade?
8. One a farm the ration of goats to sheep is 3:2 respectively. If there are 18 goats, how many sheep are on the farm?

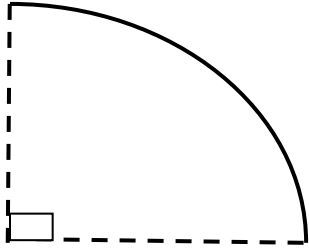
9. Given that  represents 16 girls in P.7 of a certain schools. Draw pictures to represent 72 girls?

10. Solve for y ; if $2^{2y} \times 5^2 = 100$.

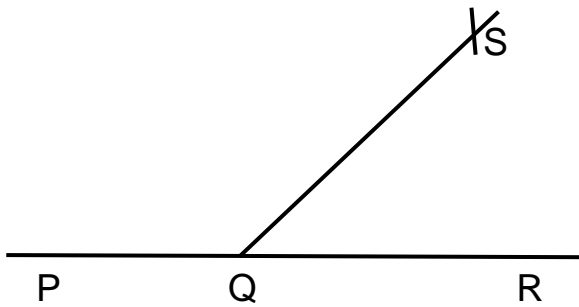
11. Workout $3x - 1$ using a number line.



12. Given that the length of the arc of the figure below is 22m. Find the radius of the figure.



13. Bisect the obtuse angle below using a ruler, a pencil and a pair of compasses.



14. A woman collected 29 mangoes from the garden. Correct these number of mangoes in finite 7.

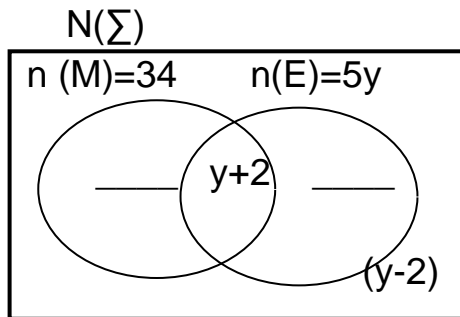
15. Baraza's grandmother was born in MCMLXXIII. Write the grandmother's age in words.
16. Given that 12 men can build a house in 5 days, how many more men will be needed to build the same house in 4 days working at the same rate?
17. Bisaso is facing East, through what angle must he turn anti-clockwise to fall South – West?

18. Given that set K has got 63 proper subsets. How many elements are in set K?

19. What angle is $\frac{2}{3}$ of its supplementary angle?

20. A man sold an article at sh. 58,000 making a profit of sh. 8000. Find his percentage profit.

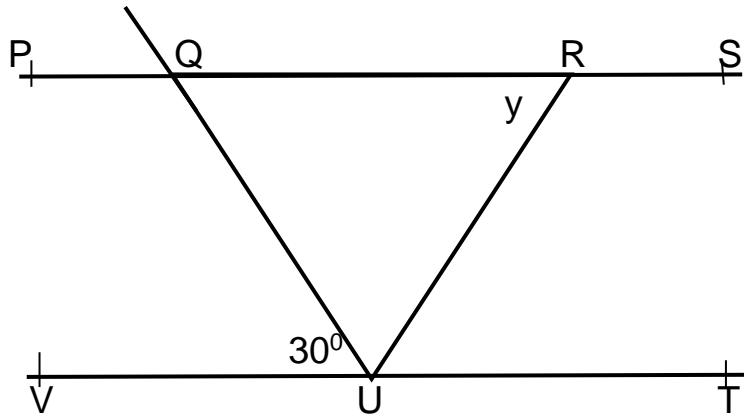
21. The Venn diagram below shows the number of pupils who like Mathematics and English(E) in a certain class. Use it to answer questions that follow.



- a) Given that the number of pupils who like English only is twenty. Find the value of Y . (2marks)
- b) Find the probability of randomly picking a pupil who likes both subjects. (2marks)

22. a) Given that $202_p = 121_{\text{five}}$, find base P. (3marks)
- b) What number has been expressed in standard form to give 3.4×10^{-2} ? (2marks)
23. a) Ketty bought 25 apples at sh. 800 each. At what price must she sell each apple to realize a 20% profit? (4marks)
- b) Express $22 \frac{1}{2} \%$ as a decimal. (1mark)

24. In the figure below line \overline{PS} is parallel to line TV, angle $QUV = 30^\circ$ and angle QUR is twice angle RUT.



a) Find the value of y . (2marks)

b) Work out the size of angle SRU . (3marks)

25. The sum of three consecutive odd numbers is 63. Find these numbers.

26. a) A man takes 3 days to weed a flower garden. Her daughter takes 6 days to weed the same flower garden. How long will they take to weed the garden working together at the same rate? (3marks)

- b) If the man weeds 20m^2 in one day, find the total area of the flower garden. (2marks)

27. a) Find the L.C.M of 80 and 90.

- b) Solve for p ; $3(3p - 1) - 6(p - 2) = 24$.

28. The table below shows how pupils performed in mathematics, test. Use it to answer the questions that follow.

Marks scored	80	70	60	K
Number of pupils	6	4	8	2

- a) If the mean mark was 71. How many pupils scored above the average mark?
(5marks)

- b) Workout the range of marks. (1mark)

29. The exchange rates at the Forex bureau are as follows;

- 1 U.S dollar - Ug sh. 4,000
- Ksh.1 - Ugsh. 30

- a) How much money in Uganda shillings will one get from 220 U.S dollars?
(2marks)

b) A bicycle costs 600 U.S dollars. What is the cost of the same bicycle in Kenya shillings? (3marks)

30. A tank was $\frac{2}{3}$ full of water. What $\frac{1}{4}$ of the water in the tank was drawn, 2,500 litres remained. Find the capacity of the tank when full. (5marks)

31. Madada is 18 years younger than Butono. In four years time, the ration in their age will be 2:3 respectively.
a) How old is each of them now? (4marks)

b) How old will Madada be in four years' time?

(2marks)

32. a) Using a ruler, pencil and a pair of compasses, construct a regular quadrilateral PQRT in a circle of radius 4cm. (4marks)

b) Measure the height PQ.

(1mark)

END