

# RUBANDA SOLIDARITY PRIMARY SCHOOL

## PRIMARY SEVEN MOCK EXAMINATION ACADEMIC PANNEL

MATHEMATICS EXAM 2023

Time:2 hours 30 minutes

Name.....

School.....

Class.....

District.....

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

### Read the following instructions carefully.

1. This paper is made up two sections A and B.
2. Section A has twenty (20) questions (40 marks)
3. Section B has twelve (12) questions (60 marks)
4. Answer all questions in both sections A and B
5. All answers in both sections must be written in the space provided.
6. Use blue or black ball point pen and ink, all drawings must be done using a pencil.
7. Unnecessary crossing of answers leads to loss of marks.
8. Any handwriting which cannot be easily read, may lead to loss of marks.
9. Moving in and out of the classroom during examination, is a sign of examination malpractice.
10. Do not share your work with your friend or else one.

QUIZ	MARKS	INITIALS
1-10		
11-20		
21-24		
25-28		
29-32		
<b>TOTAL</b>		

### SECTION A: (40 marks)

1. subtract: 
$$\begin{array}{r} 597 \\ - 353 \\ \hline \\ \hline \end{array}$$

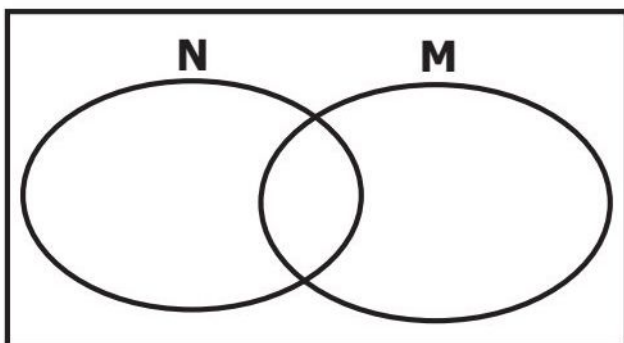
2. Write forty - five thousand forty - four in figures.

5. Use distributive property to work out  
 $(55 \times 10) - (44 \times 10)$

3. Write the next two numbers in the sequence.  
1, 3, 6, 10, \_\_\_\_\_, \_\_\_\_\_

6. A motorist covers a distance of 180km in  $4\frac{1}{2}$ . At what speed was he moving?

4. Shade  $(M \cup N)^c$  on the venn diagram below.

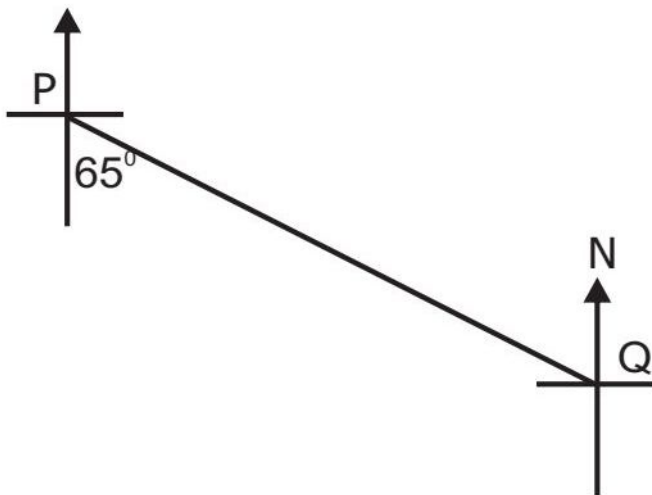


7. Solve for x.

$$x - 3 = 4$$

9. How many half litre bottles can fill a 10 litre jerrycan?

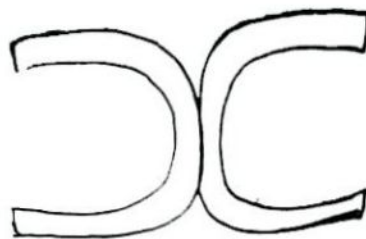
8. Find the bearing of Q from P in the diagram below.



10. If set  $A = \{c, a, t\}$ . How many subsets can be got from set A?

11. Simplify:  $-4 - -3$

14. Draw all the lines of folding symmetry in the figure below.



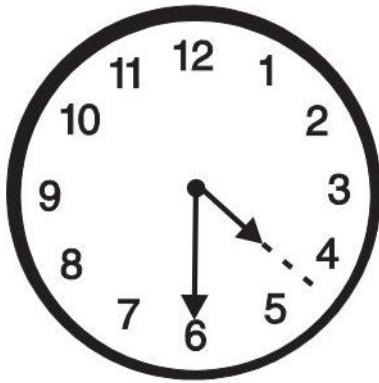
12. The Greatest common factor of two numbers is 6 and their lowest common multiple is 360. If one of the numbers is 30, find the second number.

15. Jonah is twice as old as Jonie, the difference in their age is 20 years. How old is Jonah?

13. Work out:  $\frac{3}{4} - \frac{1}{5}$

16. Change  $13_{\text{ten}}$  to binary base.

17. Write the evening time shown on the clock face below.



18. Using a ruler and a pair of compasses only, construct an angle of  $60^\circ$ .

19. A nurse's salary was increased from shs. 500,000 to shs. 600,000. Find the percentage increase.

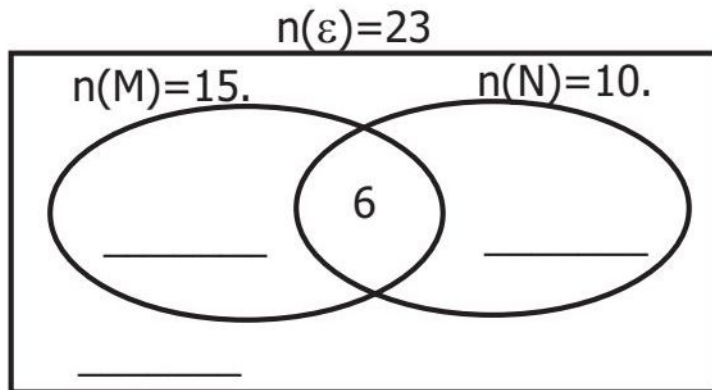
20. Expand 893 using powers of ten.

**SECTION B: (60 MARKS)**

21. Given that  $n(\text{MUN})^I = x$ ,  $n(\varepsilon)=23$ ,  $n(\text{M} \cap \text{N}) = 6$ ,  $n(\text{N}) = 10$ , and  $n(\text{M})=15$ .

Use the given information above to complete the venn diagram below.

*(3marks)*



b) How many members are in set (MUN) complement?

*(2marks)*

22. Given the number 9346, use it to answer the questions that follow.

a) Identify the place value of the last digit in the number above.

*(1mark)*

b) Write the above number in words.

*(2marks)*

- c) Work out the sum of the value of 9 and the place value of 4 in the above number. *(3marks)*

23. The rates at which the bank buys and sells in Uganda are as below.

<b>Currency</b>	<b>Buying rate</b>	<b>Selling rate</b>
Pound sterling (£1)	Ugsh. 4000	Ugsh. 4200
Us dollar (\$1)	Ugsh. 3060	Ugsh. 3100
Kenya shs(Kshs1)	Ugsh. 25	Ugsh. 30

- a) If a trader had \$ 430 and Ksh.20, how much money did he have in Uganda shillings? *(3marks)*
- b) The trader bought a radio at Ugshs. 168000. How many pound sterling did he pay? *(2marks)*

24. In Kanoni P/s bells for lower and upper Primary are rung every after 30 minutes and 40 minutes respectively for lessons to begin.

a) After how long will the two bells ring together again? (3marks)

b) If they rung for the third time at 2:00pm, At what time did the two bells ring for the second time. (2marks)

25. Given that  $P = 5$ ,  $q = 3$  and  $h = 2$   
Find; a)  $phq$  (2marks)

b)  $\frac{3p - 6h}{q}$  (2marks)

26. Using a ruler, a sharp pencil and a pair of compasses only, construct a quadrilateral ABCD where  $\overline{AB}$  is parallel to  $\overline{CD} = 7\text{cm}$ ,  $\overline{BC}$  is parallel and perpendicular to  $\overline{AD} = 5\text{CM}$ . (4marks)

b) Measure angle BAC.



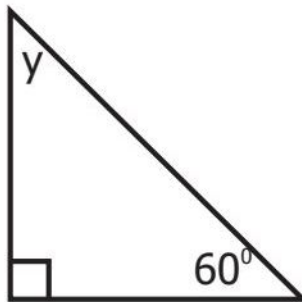
27. In a village ,  $\frac{1}{3}$  of the population are children, 25% of the remaining population are male adults. The rest of the population are female adults.

a) What fraction of the population are female adults? (3marks)

b) If there 150 female adults , what is the total number of people in that village? (2marks)

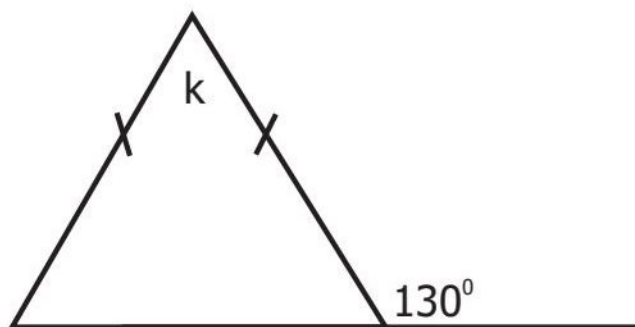
28. Use the figures below to find the value of the unknown.

a)



(2marks)

b)



(3marks)

29. A tax driver uses 10 litres of petrol for every 60km.

a) How much petrol does he need for a journey of 240km. *(2marks)*

b) If one litre of petrol costs shs.5000. How much money will he spend on petrol needed to run the tax for 2hours at a speed of 60km//hr?

*(3marks)*

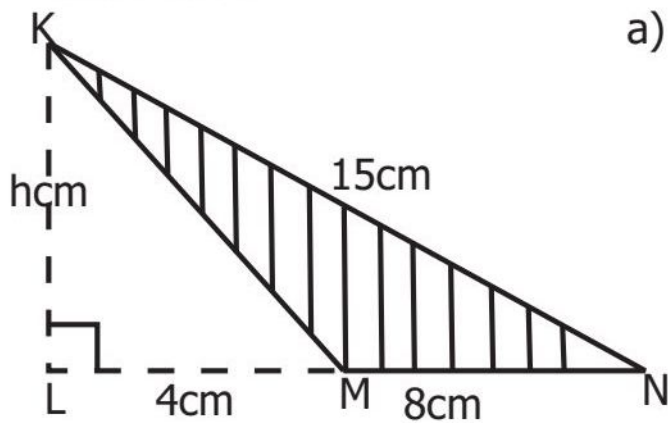
30. a) Work out:  $\frac{0.24 \times 0.3}{0.06}$

*(3marks)*

b) Simplify:  $\frac{1}{2} - \frac{1}{3} + \frac{1}{4}$  (2marks)

31. The figure below shows a triangle KMN. Use it to answer questions that follow.

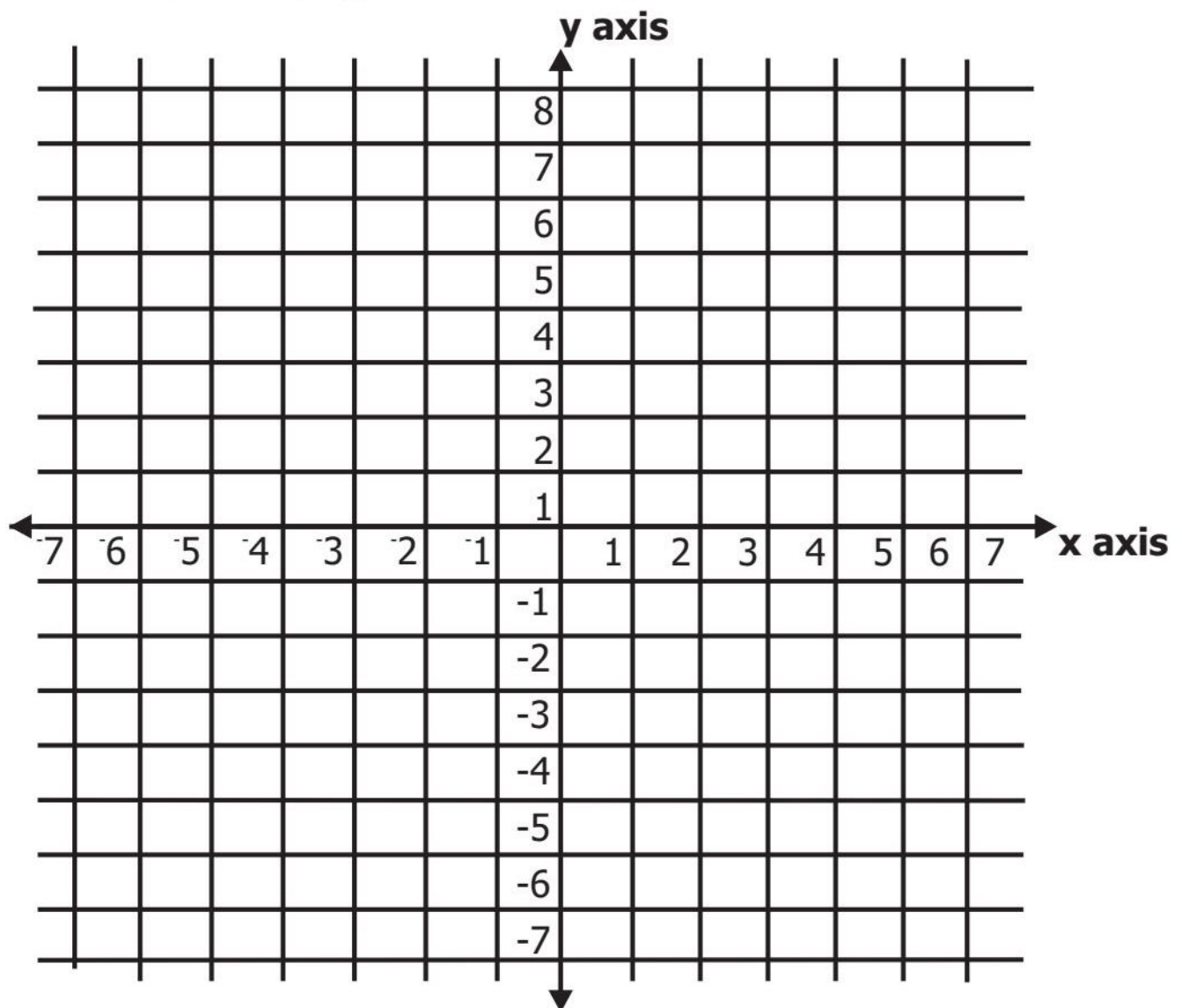
a) Find the value of h. (2marks)



b) Work out the area of the shaded part. (2marks)

32. Given the points  $P(0, +3)$  ,  $Q(-4, -4)$  ,  $R(+3, -4)$

a) Plot the points P, Q, and R on the grid below.



b) Join P to Q , Q to R and R to P. (1mark)

c) Find the area of the figure formed.

(Given that  $1\text{sq} = 1\text{cm}^2$ )

(2marks)

**END**

*Good Luck*