

MITYANA DISTRICT EXAMINATIONS BOARD
PRIMARY SEVEN MOCK 2023
MATHEMATICS

TIME ALLOWED 2HOURS 30 MINUTES

RANDOM No						Personal No		

Candidate's Name:

Candidate's signature:

School :

District:

Read the following instructions carefully

- The paper has two sections A and B
- Section **A** has 20 questions (40 marks) and
Section **B** has 12 questions (60 marks)
- Answer all questions in A and B
- All answers must be written in the spaces
provided in Blue or Black ink
- Any handwriting which can not be read may
lead to loss of marks.
- Unnecessary crossing of the work will lead
to loss of marks.
- Do not fill anything in the boxes indicated:

"For Examiners' use only"

FOR EXAMINER'S USE ONLY		
QN NO.	MARKS	EXRS NO.
1 - 5		
6 - 10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

Turn Over

SECTION A: 40 MARKS

Answer all the questions in this section
Questions 1 to 20 carry two marks each

1. Work out: 10×12 .

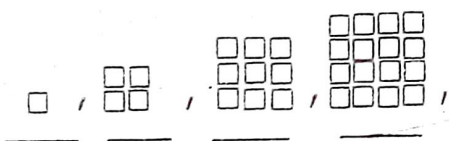
2. Expand 634 using values.

3. Simplify: $3k + k - 2k$

4. Write 49 in Roman Numerals.

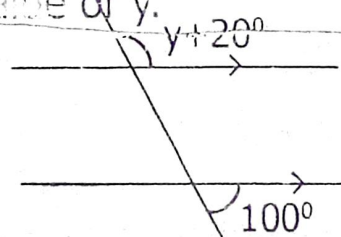
5. How many squares are in the next grouping in the pattern?

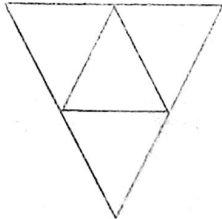
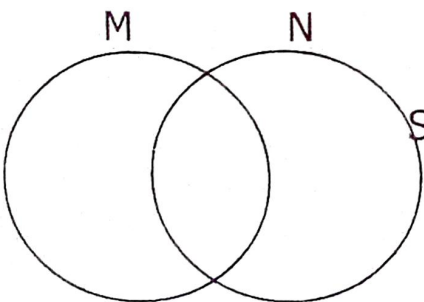
6. Given set $P = \{a, b, c, d\}$ and $Q = \{a, m, k\}$.
Find $n(P \cup Q)$



7. Subtract 369 from 500.

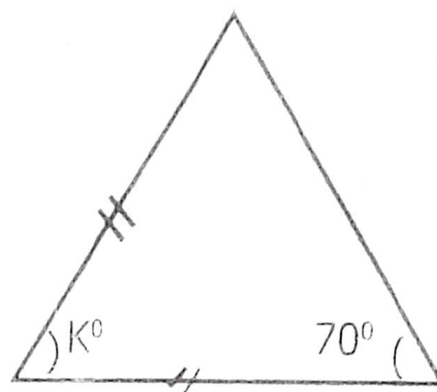
8. In the diagram below, find the value of y .



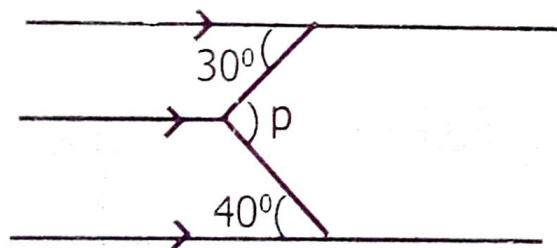
9.	Change 2.5 metres to centimetres.	
10.	Name the solid figure whose net is shown below. 	
11.	Find $\sqrt{2\frac{1}{4}}$	12. Express $\frac{1}{50}$ as a decimal fraction.
13.	Given  Shade M - N	14. Add: Hours Minutes 3 15 + 4 45 -----
15.	A thief broke into our house at eight minutes to mid-night. Express this time in a 12 hour clock system.	16. Find the next number in the series: 5 , 6, 8, 11, _____, _____

17. What number was expanded to get;
 $(3 \times 10^3) + (6 \times 10^1) + (9 \times 10^0)$

18. Find the size of angle K in the figure.



19. Calculate the value of angle p.



20. Solve: $3(p - 2) = 6$

SECTION B

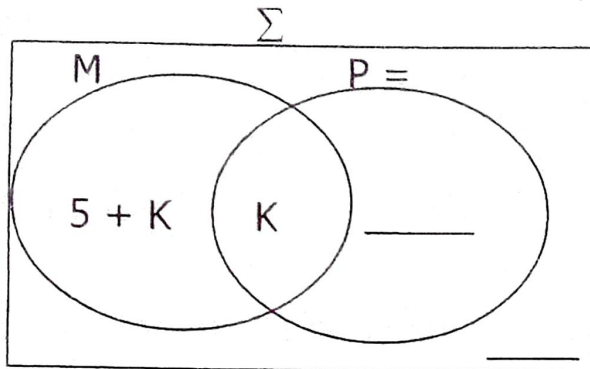
Answer all questions in this section

Marks for each question are indicated in brackets

21. At a party, 31 guests were served with Pepsi (P) and $(5 + K)$ guests were served with Mirinda (M) only. But K guests were served with both Pepsi and Mirinda Sodas while 3 guests were served with water.

a) Use the given information to complete the Venn diagram below.

(2mrks)



- b) If 27 guests were served with Mirinda altogether, find the value of K.

(2mrks)

22. (a) Solve: $3(y - 2) - 4(y - 2) = 7$ (2 marks)

- (b) A farmer is thrice as old as his daughter. Their total age is 60 years. How old is the daughter. (2 marks)



23. Use the 3X3 magic square below to answer the questions that follow.

3	6	a
b	5	2
4	c	7

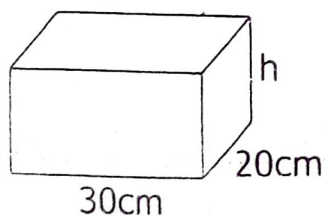
- a) Find the magic sum. (1mrk)
- b) Find the value of a. (1mrk)
- c) Find the value of b. (1mrk)
- d) Find the value of c. (1mrk)
24. Kafulu scored the following marks in the tests as: 60%, 35%, 40%, 28%, 42% and 35%
- a) What was his modal mark? (1mrk)
- b) Work out his mean mark. (3mrks)
- c) When the teacher added his crafts mark, the mean mark changed to 44%. How many marks did Kafulu score in crafts? (2mrks)

25. The table below shows the arrival and departure for a bus that travels from Kampala to Mubende daily.

Town	Arrival time	Departure time
Kampala		8:30am
Busunju	9:10am	9:30am 9:30am
Bukomero	10:30am	10:45am
Kiboga	11:15am	11:40am
Mubende	12:40pm	

- a) How long does the bus stay at Bukomero? (2mrks)
- b) How long does the bus take to travel from Bukomero to Kiboga? (2mrks)
- c) Find the total time taken by the bus to travel from Kampala to Mubende? (2mrks)

26. The figure below is a rectangular tin whose volume is 3.6 litres.



- (a) Find the value of h . (2 marks)
- (b) Find the area of its base. (3 marks)

27. Muyaye went to the market and bought the items as below.

3 bars of soap at sh.4000 each bar.

500g of meat at sh.12000 per Kg.

18 eggs at sh. 1500 for every 6 eggs.

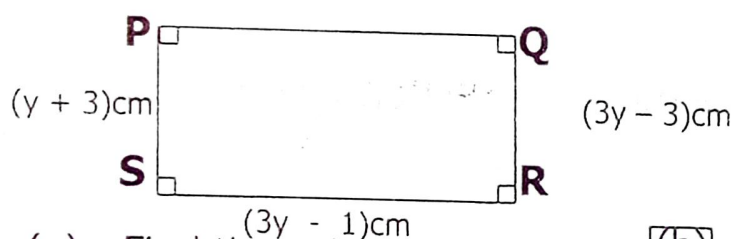
a) Calculate the total expenditure.

(4mrks)

b) If Muyaye paid sh. 20000. Work out the discount given to him.

(2mrks)

28. Use the figure below to answer the questions that follow.



(a) Find the value of y .

(3 marks)

(b) Calculate the area of rectangle **PQRS**.

(2 marks)

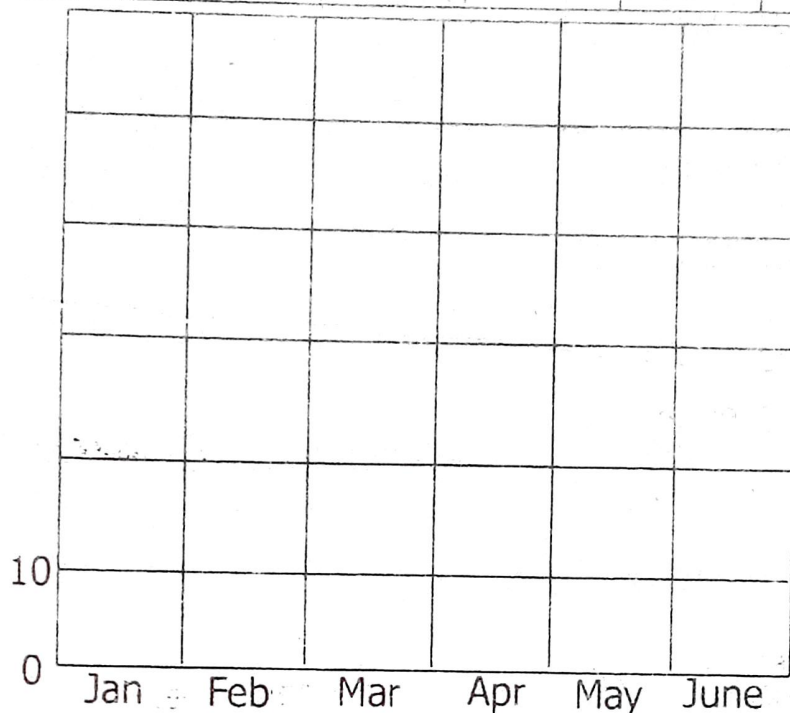
(c) Find length of \overline{PR} .

(1 mark)

29. The table below shows malaria patients who reported at a certain hospital in the first half of the year.

Months of the year	Jan	Feb.	Mar.	Apr.	May	June
Number of patients	50	30	25	30	40	60

Number of patients



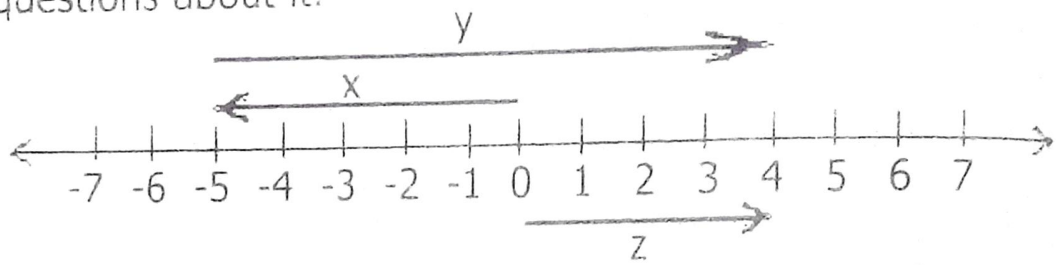
Month of year

- (a) Complete the vertical axis. (1 mark)
- (b) Draw a bar graph on the table above to represent the information. (1 marks)
- (c) If each patient was paying Sh. 20000 for consultation, how much money did the hospital collect in June? (2 marks)

30. a) Evaluate 0.5×2.4
 0.12 (3mrks)

b) Simplify: $3 - 7$ (1mrk)

31. Given the information on the Numberline below. Study it and answer the questions about it.



- a) Give the values of the movements.
- (i) $x =$ _____
- (ii) $y =$ _____
- (iii) $z =$ _____
- b) Write the mathematical statement shown on the Numberline. (2mrks)
32. a) Using a ruler, pencil and a pair of compasses only, construct a quadrilateral PQRS where line $PQ = 7\text{cm}$, $\angle PQR = \angle QPS = 60^\circ$ and $PS = QR = 4\text{cm}$. (4mrks)
- b) What name is given to the constructed quadrilateral? (1mrk)
- c) Measure line SR _____ (1mrk)

END