



VICTORY STEP EDUCATION SERVICES

BEGINNING OF TERM TWO EXAM

PRIMARY SEVEN

2023

MATHEMATICS

Time Allowed: 2 hours 15 minutes

Random No:						Personal No:		

Candidate's Name:

Candidate's signature:

District ID No:

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School Name:

Read the following instructions carefully :

1. Do not forget to write your **school** or **district** on the paper
2. This paper has two sections: **A** and **B**.
Section **A** has **20** questions and section **B** has **12** questions.
3. Answer **all** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
4. All answers must be written using a **blue** Or **black** ball point pen or ink. Any work Written in pencil will not be marked.
5. Unnecessary changes in your work and handwriting that cannot be read easily may lead to loss of marks.
6. Do not fill anything in the table indicated
"FOR EXAMINER'S USE ONLY"

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

SECTION A

1. Multiply: $6 \times 0 \times 4 =$

2. Write 12,049 in words.

3. Work out: $2 - 5 = (\text{mode } 7)$

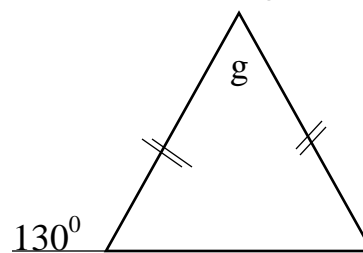
4. Find the value of x : $4^x = 64$

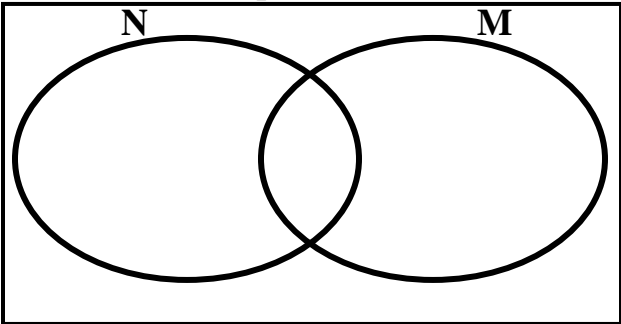
5. Write the next numbers in the sequence: 0, 1, 5, 14, 30, _____, _____

6. Express 7700gms as kilograms.

7. Moses has enough feeds for 180 pigs to last 14 days. How many more pigs are needed for the same feeds to last 12 days.

8. Find the value of g



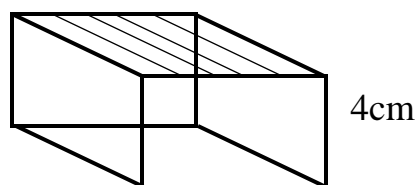
<p>9. Work out $232_{\text{five}} - 143_{\text{five}}$</p>	<p>10. How many hundreds are in the value of 4 in the number 74623?</p>
<p>11. Change 10:30p.m to 24 hour clock system.</p>	<p>12. Shade the complement of set M.</p> 
<p>13. Write CXCIV in Hindu Arabic numerals.</p>	<p>14. Calculate the arithmetic mean of; x, $x+2$, $x+4$ and $x+6$</p>
<p>15. The cost of a dozen bic pens is sh. 60,000. What is the cost of 8 similar pens?</p>	<p>16. Work out $^{-}7 - ^{-}4$</p>

17. Simplify: $\frac{3}{4} - \frac{5}{6} \times \frac{2}{3}$

18. Work out using distributive property:
 $(128 \div 4) + (72 \div 4)$

19. Construct an angle of 135°

20. The area of the shaded part is 30cm^2 . Find the volume of the cuboid.

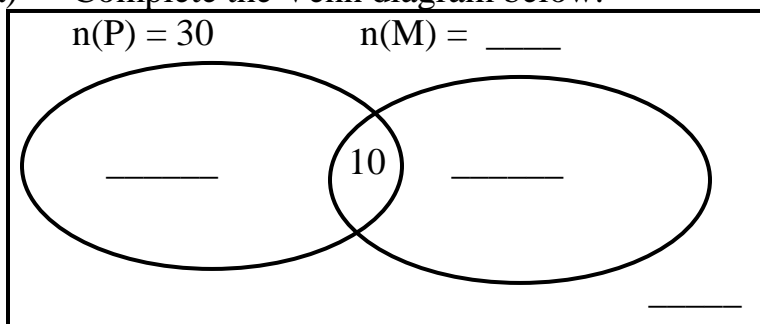


SECTION B

21. (a) In a class of 60 pupils, 30 pupils like posho (P), X pupils like matooke (M), 10 pupils like both Matooke and Posho while 5 pupils like none.

(a) Complete the Venn diagram below.

(2 marks)



(b) Find the value of x.

(2 marks)

(c) What is the probability of selecting a pupil who does not like Matooke? (2 marks)

22. Two bells at Katikati Primary school are sounded at the intervals of 40 minutes and 50 minutes for lower and upper Primary respectively.

(a) After how many minutes will they be sounded together again? (3 marks)

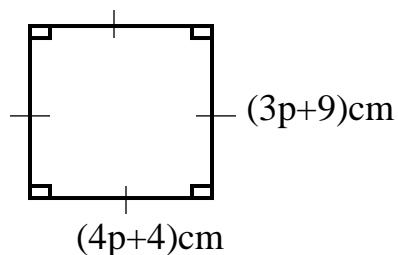
(b) If they were last sounded at 3:20 p.m. At what time were they sounded for the first time? (2 marks)

23. A motorist left town A at 7:00a.m. and reached town B at 10:00a.m. driving at a speed of 80km/hr.

(a) What is the distance between town A and B? (2 marks)

(b) If he returned at a speed of 120km/hr, calculate his average speed for the whole journey. (3 marks)

24. The sides of a square are $(4p+4)$ cm and $(3p+9)$ cm



(a) Find the value of P (2marks)

(b) Calculate the area of a square. (2 marks)

(c) Work out its perimeter.

(1 mark)

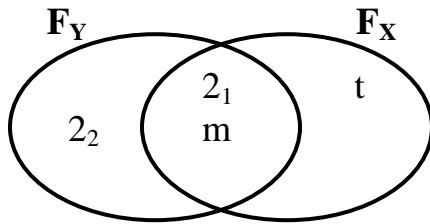
25. (a) Ali borrowed sh. 360,000 from a SACCO at a simple interest rate of 30% per year. Calculate the total amount of money Ali paid after to the SACCO after $3\frac{1}{2}$ years. (3 marks)

(b) Reduce sh. 320,000 by $12\frac{1}{2}\%$

(2 marks)

26. The Venn diagram below shows the prime factorization of y and x

(a) If the GCF is 6, find the value of M (2 marks)



(b) Find the value of t given that the L.C.M of X and Y is 60. (2 marks)

27. The circumference of a circle is 88cm.

(a) Find the radius of the circle. (3 marks)

(b) Work out its area. (2 marks)

28. (a) Given that $x = 5p$ and $p=6$ Find the value of $5p + 5x$ (2marks)

(b) Mary is 6 years older than Joseline. In 10 years' time their total age will be 50 years. How old is Mary now? (3 marks)

29. (a) Construct triangle PQR where $\angle QPR = 90^\circ$, $\angle PQR = 30^\circ$, $PQ = 8\text{cm}$ (4 marks)

(b) Measure angle $\angle R$ (1 mark)

30. Amwine went for shopping and bought the following items.

3 kg of meat at sh. 15,000 a kg

10 oranges at sh. 2000 for every 50 oranges

3 kg of meat at sh. 9000 per half kg

750gm of salt at sh. 6000 a kg

A bunch of banana at sh. 20,000

(a) If she was allowed a discount of 20% on all items, how much money did she pay?
(4 marks)

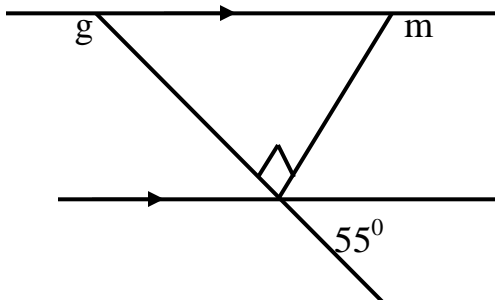
(b) If he went with two notes of fifty thousand shillings, find his balance? (2 marks)

31. (a) Simplify: $8.2 - 6.5 + 5.6$ (2 marks)

- (b) On a farm, there are $\frac{1}{7}$ more goats than cows. The farm has 192 goats. Calculate the total number of animals on the farm. (3 marks)

32. (a) What angle is $\frac{2}{3}$ of its supplement? (2 marks)

- (b) Use the diagram below to answer the questions.



Find the value of;

- (i) m (2 marks) (ii) g (2 marks)