



HILLSIDE PRIMARY SCHOOL EXAMINATIONS BOARD
PRIMARY SEVEN HOLIDAY PACKAGE FOR TERM ONE

2020

SET ONE

MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

EMIS No.						Personal No.		
INDEX NUMBER								

Candidate's Name.....Stream.....

Candidate's Signature.....

EMIS No.

District Name.....

Read the following instructions carefully

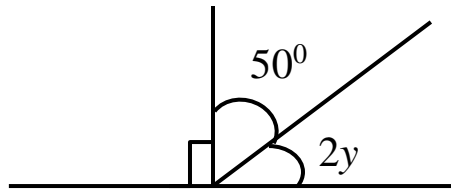
1. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and Section B has 12 questions.
2. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working must be done using a **blue** or **black** ball-point pen or fountain pen. Any work done in pencil other than graphs and diagrams will not be marked.
4. No calculators are allowed in the examination room.
5. Unnecessary changes in your 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 table indicated:
"For Examiners' Use Only" and boxes inside the question paper.

FOR EXAMINERS' 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: 40 MARKS

1. Work out: 34×3
2. Write XCIX in words.
3. Simplify: $a^2 \times a^3$
4. How many 0.25 kg packets of sugar can be got from 5 kg?
5. Find the square root of 1.44

6. Find the size of angle y in the figure below.



7. Musa deposited sh. 400,000 in the bank that offers an interest rate of 5% per month for 6 months. Find the amount of money he earned at the end of the period.

8. Change 20 m/s to Kilometres per her.

9. Convert 14 40 hour to a 12 – hour clock system.

10. Using a ruler and a pair of compasses only, construct an angle of 45° .

11. Express 34_{five} into a binary base.
12. A man bought a watch at sh. 25,000 and later sold it at sh. 30,000. Calculate his percentage profit.
13. Work out: $2 - 5 = \underline{\hspace{2cm}}$ (mod 6)
14. Find the smallest number of mangoes that can be divisible by 6 or 9 pupils and leaves 2 as a remainder.
15. Calculate the range of $^{-}8$ and $^{-}1$.

16. Solve: $3a - 6 = a + 4$

17. A lady had sh. 27,000 in her bag. She spent $\frac{4}{9}$ on meat. How much money did she remain with?

18. The circumference of a circle is 88 m. Find its radius (Take π as $\frac{22}{7}$).

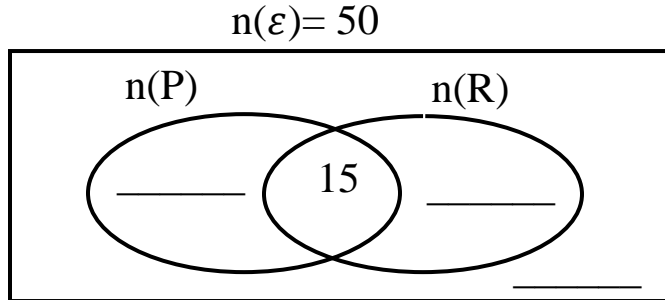
19. If 8 girls can take 5 days to do a piece of work. How many more boys can 4 girls take to do the same piece of work?

20. There are 32 subsets in set D. How many members can be got from set D?

SECTION B: (60 MARKS)

21. In a class of 50 pupils, h like Posho (P), 25 like rice (R), 15 like both posho and rice while 5 pupils do not like any of the two types of food.

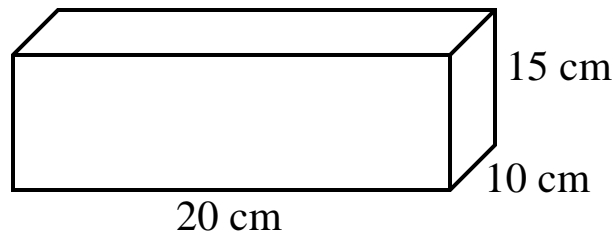
a) Complete the Venn diagram below. (3marks)



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

c) How many pupils do not like posho? (1mark)

22. The figure below is a cuboid. Use it to answer the questions that follow.



- a) How many litres of water can the figure above hold when it is completely full? *(2 marks)*

- b) Work out the total surface area of the figure above. *(2 marks)*

23. Three bells ring at the intervals of 30 minutes, 40 minutes and 45 minutes respectively. If they rang together at 11 : 50 am,

- a. After how long will the three bells ring together again? *(2 marks)*

- b. At what time will the three bells ring together again? *(2 marks)*

24. a) Using a ruler and a pair of compasses only, construct a triangle ABC in which $AB = 7$ cm, $AC = 5$ cm and angle $BAC = 120^{\circ}$. (4marks)

b). Measure the line BC. (1mark)

25. The table below shows the marks scored by pupils in a mathematics test.

Marks scored	80	70	90	p
Number of pupils	2	3	1	4

a) How many pupils sat for the test? (2marks)

b) If the mean mark is 70, find the value of p?

(2marks)

26. Mary went to the market and bought the items as shown on the table below.

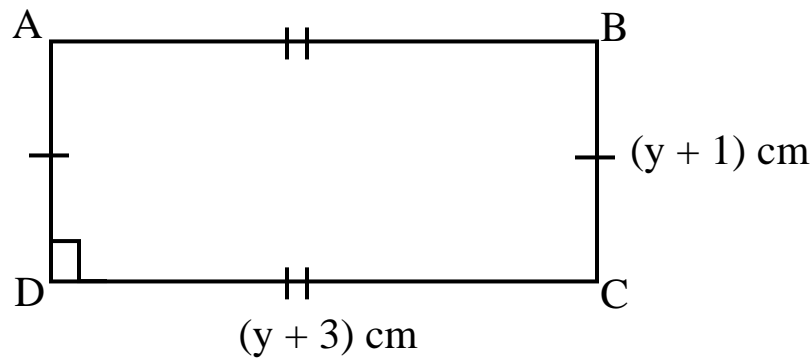
Item	Quantity	Unit price	Total cost
Sugar kg	Sh. 3,000 per kg	Sh. 9,000
Meat	2 kg	Sh. 12,000 per kg	Sh.....
Milk	1½ litres	Sh. each litre	Sh.
Bread	3 loaves	Sh. @ loaf	Sh. 13,500
	Total expenditure		Sh. 50,700

a) Complete the table above.

(5 marks)

a) If she was given a discount of 10%, how much money did she pay? (1 mark)

27. The perimeter of the rectangle below is 28 cm. Study it carefully and use it to answer the questions that follow.



- a) Find the value of y . (3 marks)

- b) Work out the area of the figure above. (2 marks)

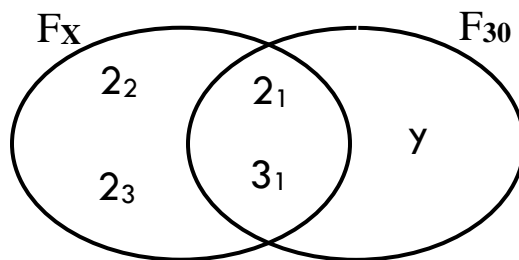
28. In a school of 2000 pupils, $\frac{3}{4}$ of them are girls and the rest are boys. If $\frac{2}{3}$ of the girls and $\frac{3}{5}$ of the boys are in lower primary,

- a. How many boys are in the school? (2 marks)

b. Find the number of pupils in upper primary.

(3 marks)

29. The Venn diagram below represents the prime factors of two numbers. Use it to answer the questions that follow.



a) Find the value of X.

(2marks)

b) Calculate the value of y.

(2marks)

c) Work out the LCM of X and 30.

(2marks)

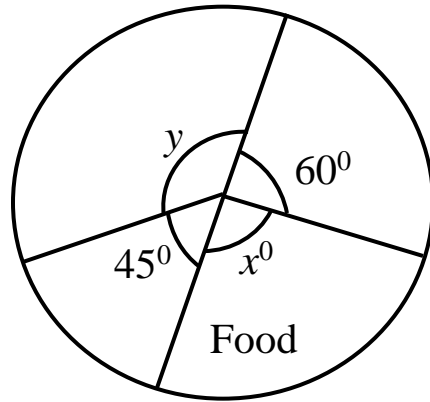
30. a) Solve: $2(2a + 4) - 2(a - 2) = 6$ (2 marks)

b) If $p = 3$, $q = -4$ and $r = 2$, find the value of $\frac{pr-q}{p-q}$ (2 marks)

31. Moses, Timothy and Robert shared a certain amount of money in the ratio of 2: 3: 5 respectively. If Robert got sh. 60,000 more than Moses,
a) How much money did they share altogether? (4 marks)

b) What percentage of the money did Timothy get? (1 marks)

32. The pie-chart below shows Muzorewa's monthly expenditure. Use it to answer the questions that follow.



- a) Find the value of y in degrees. *(2 marks)*
- b) Work out the size of angle marked x . *(2 marks)*
- c) If he spends sh. 120,000 on rent, find his monthly income. *(2 marks)*

END