HILLSIDE PRIMARY SCHOOL

EXAMINATIONS
2023
MATHEMATICS (SET EIGHT)
Time Allowed: *2 Hours 30 Minutes*

Index No. | | | | | | | | |

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

Candidate's Signature...

EMIS No...

District Name..

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**.
   Section A has 20 questions and Section B
   has 12 questions

2. Answer **all** questions. All answers to both
   sections **A** and **B** must be written in the
   spaces provided.

3. **All** working must be done using a blue or
   black ball-point pen or fountain pen. Any work
   written in pencil other than graphs and diagrams
   will not be marked

4. No calculators are allowed in the examination
   room.

5. Unnecessary changes in work may lead to
   loss of marks. Any handwriting that cannot easily be
   read may lead to loss of marks.

6. Do not fill anything in boxes
   indicated: **"For Examiners' Use Only"**
   and those inside the paper.

FOR EXAMINERS' 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		

1. Work out $33 \div 3$

2. Write 9009 in words

   ....

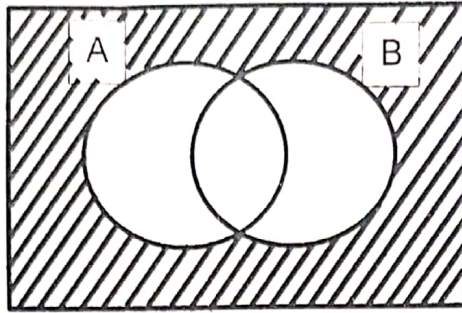   ....
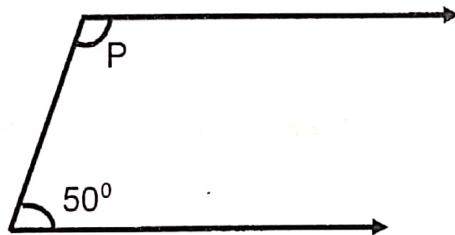
3. Simplify: $3b + a + b + 2a$

4. Increase sh. 6000 by 20%

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

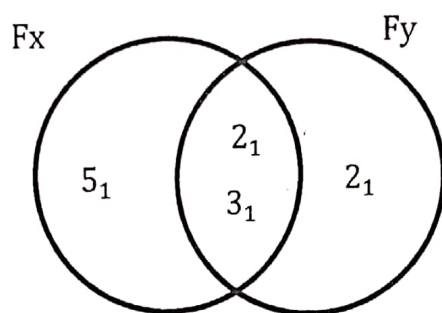6. Express $\frac{2}{5}$ as a decimal

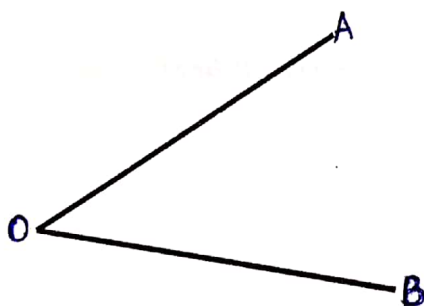7. Find the value of p in the diagram

8. Joan bought a watch at Sh.8000 and sold it making a profit of Sh.1500. Find the selling price of the watch.

9. Work out: $1101_{two} + 11_{two}$

10. Use the Venn Diagram below to find GCF of Fx and Fy.

Fx   Fy

5_1 2_1 2_1

3_1

11. Using a ruler, pencil and pair of compasses only, bisect angle AOB
Below:

A

O

B

12. Find the number whose standard form is 9.3×10^3

13. Use a distribution property to work out: $(33.4 \times 9) - (9 \times 3.4)$

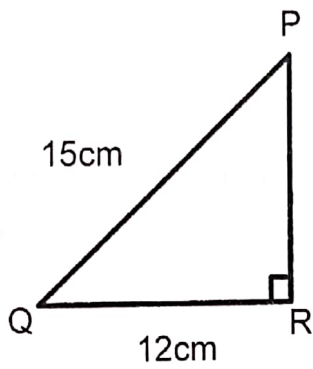14. 6 boys can paint a house in 24 hours. How many boys are needed in order to paint the same house in only 18 hours

15.   Solve: $2g - 6 = 12$

16. Find the next number in the sequence: 5,7,10,15, 22. _____

17. Amou is the x person from either side of a line of 15 boys. Find the value of x.

18. How many meters are in 0.45km?

19. Find length PR in the triangle

P

15cm

Q
12cm
R

20. Work out: $1\frac{1}{2} \times \frac{1}{3} \div \frac{1}{4}$

Answer all questions in this section.

Marks for each part of the question are indicated in the brackets

21. Write the number whose expanded form is given below;
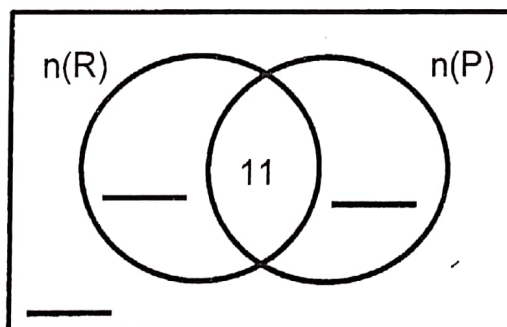 $(5 \times 10^2) + (6 \times 10^1) + (7 \times 10^{-2})$.

    (2marks)

Given the digits: 5,7 and 3. Write the largest number formed from the digits in words.   **(2marks)**

22. At a party, k guests ate Rice (R) only, (K+4) ate posho (P) only. 11 guests ate both types of food, while 2 did not eat any of the two types of food.

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

b) If 22 guests ate only one type of food, find the value of k.

(2 marks)

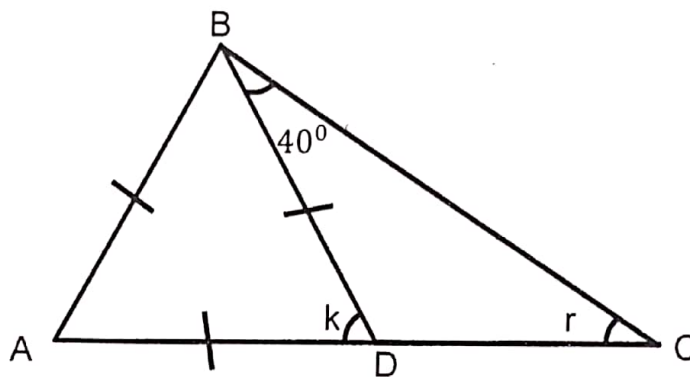c) How many guests attended the party? (1mark)

23. Solve $\frac{2}{5}m - 3 = 5$. (3marks)

b) Subtract: r + 2 from 3r + 4 **(2 marks)**

24. The figure ABC below is a triangle. Study it and use it to answer questions that follow.

b) Find the size of angle marked k. **(2 marks)**

c) Workout the value of angle r in the figure. (2 marks)

25. The table below shows the items bought by Sultan from a market
a) Complete the table. (4 marks)

ITEM	QUANTITY	UNIT COST	TOTAL COST
Rice	3kg	Sh. 3,500	Sh. _____
Sugar	$2\frac{1}{2}$	Sh. _____	Sh. 5,000
Paraffin	_____ liters	Shs.3,600	Sh.7,200
			Sh. _____

b) If sultan was offered a discount of Sh. 2,300 on his total expenditure, find how much he paid **(2 marks)**

26. A teacher wrote three consecutive even numbers on the chalkboard. The sum of the numbers he wrote is 36. If the middle number is p find the value of p. **(3 marks)**

b) Express 36 as a product of its prime factors **(2 marks)**

27. Oguti borrowed Sh. 400,000 from a bank that offers an interest rate of $2\frac{1}{2}\%$ Per month for a period of 9 moths.

a) Calculate the interest he is to pay back to the bank.   **(3 marks)**

b) Find the total amount of money he will pay back after the period.

(2 marks)

28. a) Using a ruler, pencil and a pair of compasses only, construct quadrilateral WXYZ, such that $\overline{WX}$ = 8cm, $\overline{WZ}$= 5.5cm and angle WXY = 45º   **(4 marks)**

b) Measure the length of diagonal XZ   (1 mark)

29. A mathematics examination started at 8:30am and ended at 11:00am. For how long was the examination done?

(2 marks)

b) Express 15:15am into a 24 hour clock system.   (2marks)

30. Martha, Winnie and Catherine shared a certain amount of money in the ration of 2:5:3 respectively. If Winnie got sh. 60,000 more than Martha.
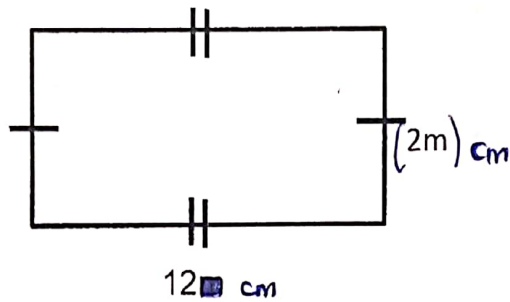a) How much money did they share?   (3 marks)

b) Express the share for Catherine as a percentage.　　(2 marks)

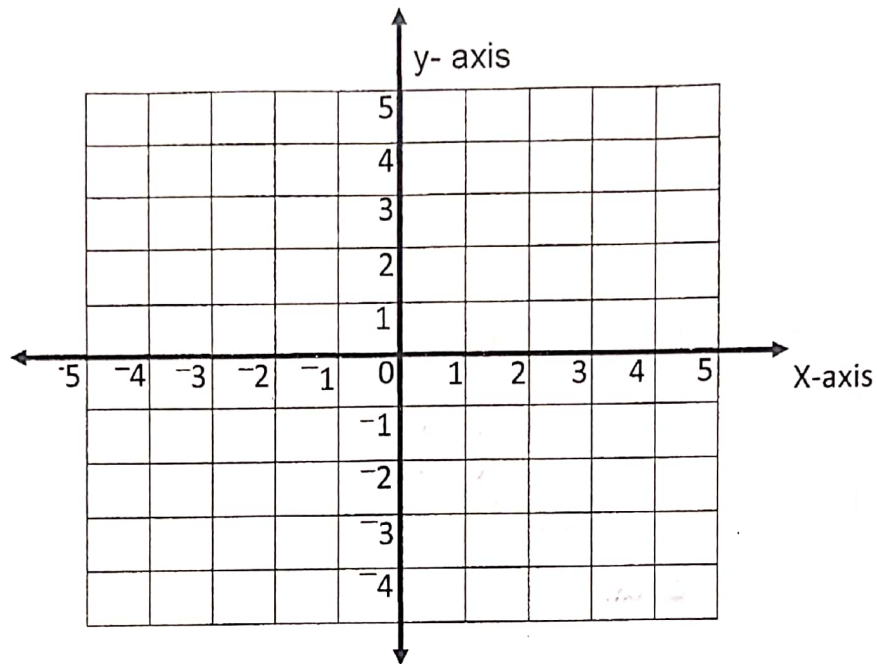31. The figure below is a rectangle. Use it to answer questions that follow.

$(2m)$ cm

12 cm

a) If the perimeter of the rectangle is 48cm, find the value of m
　　(3marks)

b) Work out the area of the rectangle   (2 marks)

32. On the arid below:

a) Plot the pints A(⁻3, ⁻2), B(⁻3,+3), C(⁺4,⁺3), D(⁺4, -2)   (4 marks)

b) Join the points A to B, B to C, C to D, D to A. Name the figure formed.
                                                         (2 marks)

END