



# THE PRIME EXAMINATIONS 2023

## PRIMARY SIX BEGINNING OF TERM III

### MATHEMATICS

Time allocated 2 hours 30 minutes



FOR  
WELL EXPLAINED LESSON VIDEOS  
WITH TESTS BY EXPERT TEACHERS  
DOWNLOAD THE PRIME LEARN APP  
Available on the App Store and Google Play  
www.prime-learn.com

Name: .....

Signature: .....

School: .....

District Name: .....

#### READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper has **two** sections: A and B. Section A has **20** questions (**40 Marks**) and Section B has **12** questions. (**60 Marks**)
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 ink. Any work done in pencil other than on graphs and diagrams will **not** be marked.
4. **No calculators** are allowed in the examination room.
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 EXAMINERS' USE ONLY"

PUBLISHERS OF:-

THE PRIME; SCHEMING FRAME WORKS, PUPIL'S WORKBOOKS, LESSON COURSE BOOKS, HOLIDAY PACKAGES, LEARNING GAMES, REVISION BOOKS, PLE ANALYSIS REPORTS AND MANY MORE.

#### FOR EXAMINERS' USE ONLY

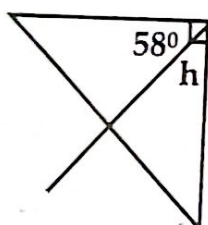
QUESTION NUMBER	MARKS ATTAINED	INITIALS
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

APPROVED


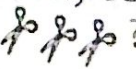
Consultant

Mathematics Department (PLEC)

### Section A. (40 Marks)

1	Workout: $643 + 154$	2	Given that Set $M = \{c, a, t\}$ , list down all the subsets contained in set $M$ .
3	Find the next number in the sequence. 9, 14, 12, 17, 15, _____	4	Express 40cm as a percentage of a metre.
5	Solve: $\frac{P}{3} = 5$	6	In a stream of 40 pupils, 24 pupils are boys and the rest are girls. Find the probability of choosing a girl to lead morning prayers from the class at random.
7	Find the value of $h$ in the figure. 	8	Find the place value of 8 in the number 78654.
9	Given that $a = 16$ , find the value of $\sqrt{a}$		
10	Work out: $+6 + 2$	11	The cost of a pair of eggs is sh 800. Find the cost of a dozen of eggs.



12	If  represents 12 scissors, how many scissors are represented by  ?	13	Write 6275 in expanded form using powers of ten.
14	A taxi carries 14 passengers per trip. How many trips will it make to carry 149 passengers?	15	Okotel drove a car at a speed of 90km/hr for 30 minutes. Calculate the distance he covered.
16	In a class, the ratio of boys to girls is 2:3. If there are 24 girls in the class, find the total number of pupils in the class.	17	The exchange rate for ksh 1 = Ugsh 35. Find how much one gets from 100 Kenyan shillings.
18	Express 16% as a fraction in its lowest form.	19	A 300ml cup was used to serve tea. If 12 litres of tea were prepared, find the number of cups that were obtained from the tea prepared.
20	Babirye was facing South East and turned anticlock wise through an angle of $180^\circ$ . What new direction did she face?		

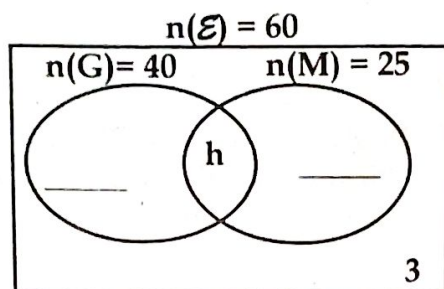
**Section B. (60 Marks)**

21

In Kamanzi P/S there are 60 pupils in P.6. 40 pupils like games (G), 25 pupils like music (M),  $h$  pupils like both games and music while 3 pupils like none of the two.

(a) Complete the Venn diagram.

(02 marks)



(b) How many pupils like both games and Music?

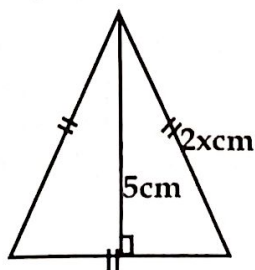
(02 marks)

(c) How many pupils like Music only?

(01 mark)

22

The perimeter of the triangle below is 36cm.



(a) Find the value of  $x$ .

(03 marks)

(b) Calculate the area of the triangle.

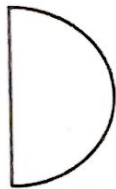
(02 marks)

23	<p>(a) Workout: <math>\frac{0.25 + 0.23}{1.7 - 0.5}</math> (03 marks)</p> <p>(b) Simplify: <math>\frac{9}{10} \times \frac{1}{3} \div \frac{2}{5}</math> (02 marks)</p>
24	<p>(a) Given that <math>x=2</math> and <math>y=5</math>, find the value of <math>7x-3y</math>. (03 marks)</p> <p>(b) Collect like terms and simplify: <math>12p + 4r + 7p + 10r</math>. (02 marks)</p>
25	<p>(a) Workout: <math>-6 + +10</math>. (02 marks)</p> <p>(b) What integer when added to <math>-5</math> gives zero? (02 marks)</p>

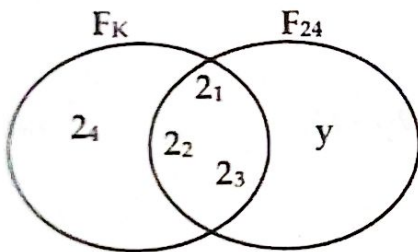
26 (a) Using a protractor, draw an angle of  $130^\circ$ . (02 marks)

(b) Namusisi made a  $\frac{3}{4}$  turn. Through what angle did she turn? (02 marks)

(c) Show the lines of folding symmetry on the figure below. (01 mark)



27 The Venn diagram below shows the prime factors of  $k$  and 24. Use it to answer the questions below.



(a) Find the value of;

(i)  $k$

(02 marks)

(ii)  $y$

(02 marks)

(b) Workout the LCM of  $F_k$  and  $F_{24}$ .

(02 marks)



28 Naira went to the shop and bought the following items.

2 loaves of bread at sh 5500 per loaf.

3 kg of sugar at sh 3000 per 1 kg.

$1\frac{3}{4}$  litre of milk at sh 2400 per litre.

(a) Calculate her total expenditure.

(04 marks)

(b) If she remained with sh 400, find the amount of money she went with to the shop.

(01 mark)

29 Nanyonjo, Nakuya and Namirimu shared sh 24000 in the ratio of 1:3:4 respectively.

(a) How much money did each get?

(03 marks)

(b) How much more did Namirimu get than Nakuya?

(02 marks)

30 A cyclist covered a distance of 144km in 2 hours.

(a) Calculate the speed of the cyclist.

(02 marks)

(b) How long would he take to cover 360km at the same speed?

(02 marks)

31

In a certain hospital, there are 120 nurses.  $\frac{1}{4}$  of the nurses work in the children's ward,  $\frac{2}{5}$  work in the Intensive Care Unit and the rest work in the general ward.

(a) How many nurses work in the Intensive Care Unit?

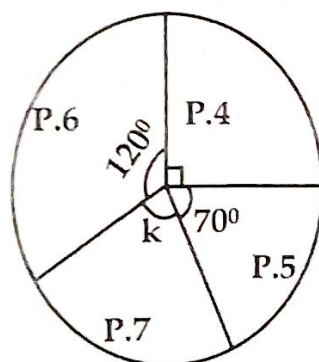
(03 marks)

(b) How many more nurses work in the general ward than in the children's ward?

(02 marks)

32

The piechart below shows the number of pupils in four classes at Umoja French School in Mukono. Use it to answer the questions below.



(a) Find the value of k.

(02 marks)

(b) If 72 pupils are in P.7, find the total number of pupils in the four classes.

(02 marks)

(c) How many pupils are in P.4?

(02 marks)