



# The PRIME EXAMINATIONS 2023

## P.7 PRE - PLE MAGIC SET IV

### MATHEMATICS

Time allowed 2 hours 30 minutes

INDEX NO: Random No. Personal No.

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|



FOR  
WELL EXPLAINED LESSON VIDEOS  
WITH TESTS BY EXPERT TEACHERS  
DOWNLOAD THE PRIME LEARN APP  
www.prime-learn.com

Candidate's Name: .....

Candidate's Signature: .....

School Random No. ....

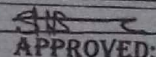
District ID: .....

#### READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B** Section **A** has 20 questions and section **B** has 12 questions. The paper has **9 printed pages**.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. All working **must** be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and 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 those boxes inside the question paper.

#### 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 (PEC)

PUBLISHERS OF:-

THE PRIME; SCHEMING FRAMEWORKS, PUPILS' WORKBOOKS, LESSON COURSE BOOKS, HOLIDAY PACKAGES, LEARNING GAMES AND MORE...

Organised by: PRIME EDUCATIONAL CONSULT @2023

Kampala

Turn Over



### Section A (40 Marks)

WARNING: Not to be reproduced electronically!!

1 Find the missing number

$$\begin{array}{r} 36 \\ + \square \\ \hline 43 \end{array}$$

2 Write in figures; Nineteen thousand twenty four.

3 Given that set  $T = \{1, 2, 3, 4, 5, 6, 7\}$   
 $T \cup S = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$   
 $T \cap S = \{3, 4, 5\}$ , Find  $n(S)$

4 The table below shows pupils in four classes who have eye problems.

| CLASS | TALLY |
|-------|-------|
| P.4   |       |
| P.5   |       |
| P.6   |       |
| P.7   |       |

How many pupils have eye problems altogether?

5 An Art and Craft lesson started at twenty minutes to three in the afternoon. Write the time it started in 24 hour clock.

6 Subtract  $3(p + 2)$  from  $7p$ .

WARNING: Not to be reproduced electronically!!



7

A family of 9 people consumes 3 litres of milk per day. How many litres will they consume if 3 more people join the family?

8

Nunda bought 3kg of sugar and shared it among his wives. If each wife received 750g, how many wives does Nunda have?

9

Using a protractor and a pencil only, draw an angle of  $115^\circ$ .

10

Find the missing numbers in the sequence; 1, 8, 27, \_\_\_\_\_, 125, \_\_\_\_.

11

Work out  $(49 \div 4) - (21 \div 4)$

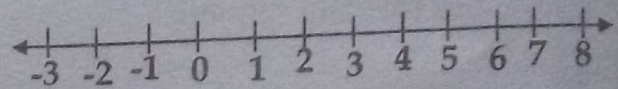


12

Round off 4568 to the nearest hundreds.

13

Work out;  $+4 - +7$  on the number line.



14

A cyclist moving at a speed of 40km/hr covered a distance of 60km. Calculate the time the motorist took to cover the journey.

15

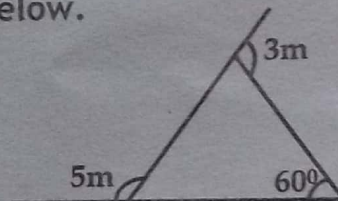
Find the fraction mid-way  $\frac{1}{2}$  and  $\frac{1}{3}$ .

16

Maiso bought Ksh 270 using Ugsh 9450. Find the cost of Ksh1.

17

Find the value of  $m$  in the diagram below.



18

The number of pupils in a certain P.1 class reduced by  $33\frac{1}{3}\%$ . If the old number of pupils was 96, find the new number of pupils in P.1.

19

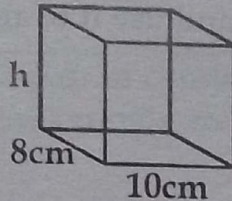
Solve the inequality:  $11 > 3 - 2k$



(b) Simplify  $\frac{1}{3}$  of  $\frac{2}{5} + \frac{1}{4} \div \frac{15}{28}$

(03 Marks)

- 23 The volume of the figure below is  $480\text{cm}^3$ . Study it and answer the questions below.



(a) Find the value of h.

(03 Marks)

(b) Calculate the sum of all its edges.

(02 Marks)

- 24 Study and complete Matovu's shopping table below.

(06 Marks)

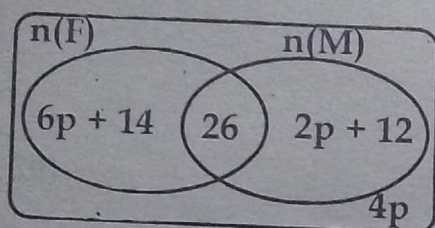
| Item              | Quantity            | Unit cost    | Amount     |
|-------------------|---------------------|--------------|------------|
| Posho             | 4kg                 | Sh. _____    | Sh.12,800  |
| Beans             | _____ kg            | Sh.6000      | Sh.3,000   |
| Sugar             | 750g                | Sh.4000perkg | Sh. _____  |
| Milk              | $1\frac{1}{2}$ ltrs | Sh. _____    | Sh.3000    |
| Rice              | 3kgs                | Sh. _____    | Sh. _____  |
| Total expenditure |                     |              | Shs.35,300 |



- 20 Jena Herbal Company packs Jena Cough Mixture in 400 millilitre tins. How many such tins can be packed from a 12 litre container?

Section B (60 Marks)

- 21 At a birthday party, guests were served with Fanta (F) and Mirinda (M) as shown on the Venn diagram below. Study it carefully and use it to answer questions that follow.



- (a) If 64 guests were served with Fanta, find;  
(i) the value of  $p$ .

(02 Marks)

- (ii) the total number of guests who attended the party.

(02 Marks)

- (b) Find the probability that a guest picked at random did not take any drink.

(01 Mark)

- 22 (a) Express  $\frac{2}{45}$  as a recurring decimal.

(02 Marks)

WARNING: Not to be reproduced electronically!!



25

(a) What number has been expanded to give  $(2 \times 3^2) + (0 \times 3^1) + (1 \times 3^0)$ ?

(03 Marks)

(b) Work out  $54_{\text{six}} \times 22_{\text{six}}$

(02 Marks)

26

(a) Using a pair of compasses and a ruler only, construct a quadrilateral PQRS whose diagonals are 16cm and 12cm respectively.

(03 Marks)

(b) Measure the length QR.

(01 Mark)

27

The average weight of 6 girls is 55kg. When two other girls join the group, the average weight becomes 50. The eighth girl is 6kg heavier than the seventh girl. Find the weight of the eighth girl.

(05 Marks)

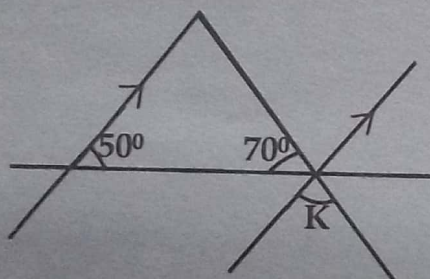


28

- (a) The interior angle and exterior angle of a regular polygon are in the ratio of 3:2, find number of sides the polygon has. (03 Marks)

WARNING; Not to be reproduced electronically!!

- (b) In the figure below, find the size of angle K. (02 Marks)



29

Among, Lunkuse and Kembabazi shared a certain number of books in the ratio of 3:4:9 respectively.

- (a) If Kembabazi got 25 books more than Lunkuse, how many books did they share all together? (03 Marks)

- (b) How many books did Among get?

(02 Marks)

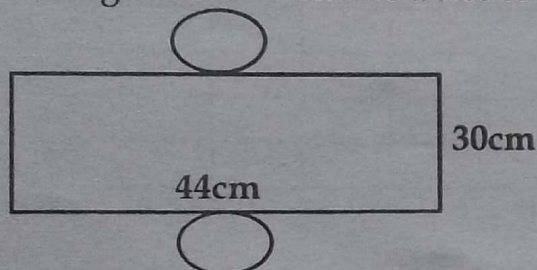
WARNING; Not to be reproduced electronically!!



30 Kamya is 32 years old and his daughter is 14 years old.  
(a) How many years ago was Kamya three times as old as his daughter? (03 Marks)

(b) How old was Kamya then? (02 Marks)

31 The figure below shows a net of a cylinder whose height is 30cm.



(a) Find the diameter of the cylinder. (02 Marks)

(b) Calculate the;  
(i) Area of the sheet needed to cover the circular ends of the cylinder. (02 Marks)

(ii) Capacity of the cylinder. (01 Mark)

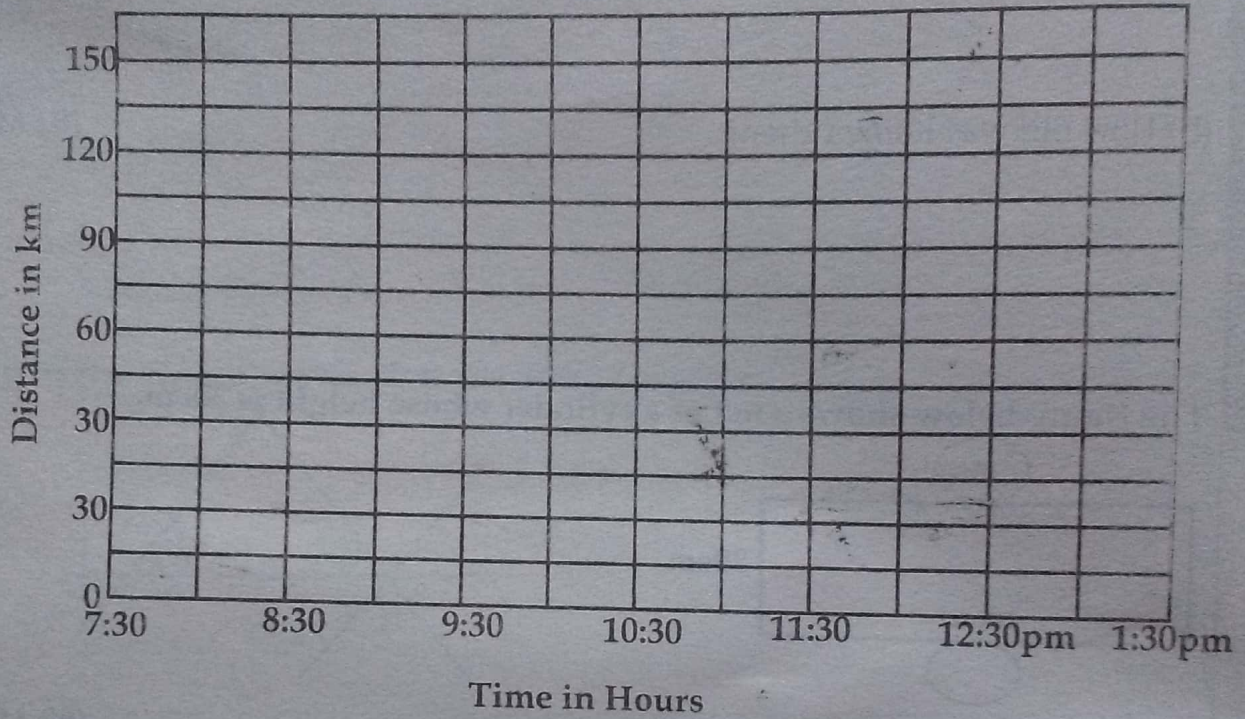


32

Epodoi started his journey from home at 8:30am, driving at 30km/hr for 2 hours to town P. He rested for 30 minutes at town P and continued to town Q at a speed of 40km/h for  $1\frac{1}{2}$  hours.

(a) Show Epodoi's journey on the graph below.

(03 Marks)



(b) Find the average speed for the whole journey.

(02 Marks)



#### REVISION TIP

Check the accuracy required for your solution (correct units, labeling of angles, putting the operation sign among others).