

# Prime THE PRIME EXAMINATIONS 2024

## P.7 SPECIAL EXAMINATIONS

### MATHEMATICS

Time allowed 2 hours 30 minutes

INDEX NO:

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PRIME CODE

P

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District ID No.: .....



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#### READ THE FOLLOWING INSTRUCTIONS CAREFULLY

- Do not write your **school** or **district name** anywhere on this paper.
- 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.
- Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
- 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.
- No** **calculators** are allowed in the examination room.
- Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to **loss of marks**.
- 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:

*[Signature]*  
Consultant

Mathematics Department (PEC)

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Kampala

Turn Over

# Section A (40 Marks)

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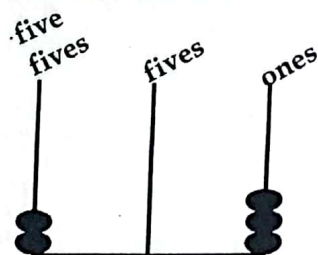
1

Workout:  $42$

$\times 3$

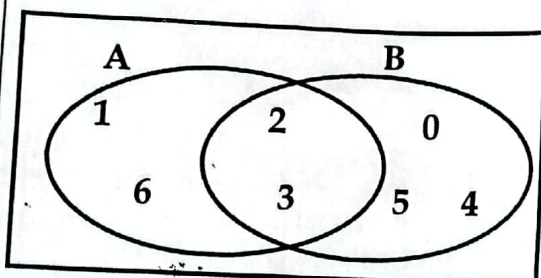
2

What base five numeral is represented on the abacus below?



3

Study the Venn diagram below and find  $n(A \cup B)$



4

Arrange the integers  $-7, 4, 0, -3$  and  $6$  in descending order.

5

A seminar for the born again faith started on Saturday and took 25 days. Find the day of the week it ended.

6

Change  $\frac{3}{4}$  litres to millilitres.

Work out:  $13^2 - 12^2 \times 8^0$

8

An examination that took  $2\frac{3}{4}$  hours ended at 1:05 pm. At what time did it begin?

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9

Solve;  $3-p > 4$ 

10


Find the next number in the sequence.


26, 27, 35, 62, \_\_\_\_\_

11

Kamoga had a bundle of fifty thousand shilling notes numbered consecutively from DJ 9155836 to DJ 9155885. Find the amount of money Kamoga had.

12

Given that  = 3 mangoes and

 = 5 apples. Find the total number of fruits represented below.



13

Show whether the number 675 is exactly divisible or not divisible by 9

14

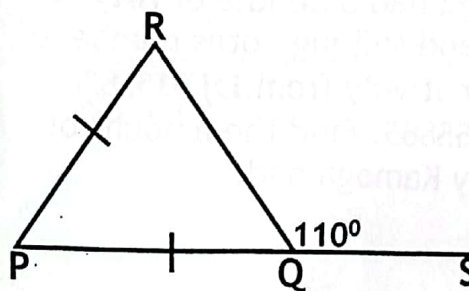
Using a ruler and a pair of compasses only, construct an angle of  $75^\circ$

15 Subtract  $(d+3)$  from  $(5d-1)$

16 Find the average of 25,  $(3k+4)$  and 10

17 A trader sold a watch at sh.26400 and made a profit of 10%. Find the cost price of the watch.

18 In the diagram below, find the size of angle QPR



19 A minute hand of a clock measures 14cm. What distance does it cover in 2 hours. ( $\pi = \frac{22}{7}$ )

20 Use  $>$ ,  $<$  or  $=$  to complete the statement below.

$$\frac{5}{6} \quad \text{---} \quad \frac{3}{4}$$

Section B (60 Marks)

21 Simplify:

(a)  $\left(\frac{1}{3} + \frac{1}{3}\right) \div 1\frac{1}{4}$

(03 marks)

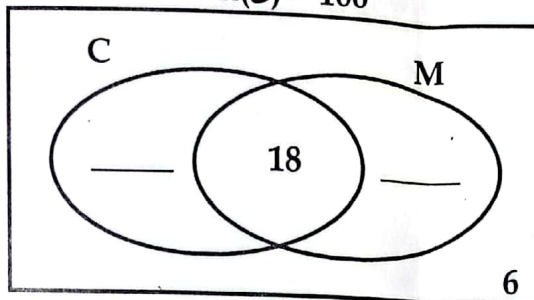
WARNING: Not to be reproduced electronically  
(b) Work out:  $14.2 - 36.8 + 32.46$

(03 marks)

- 22 At a party attended by 100 guests, 60 ate Chicken (C), y ate Meat (M), 18 ate both meat and chicken while 6 ate other foods.

(a) Use the information above to complete the Venn diagram below. (02 marks)

$$n(\mathcal{E}) = 100$$



(b) How many guests ate meat only?

(03 marks)

- 23 In a certain school, pupils are divided into houses as follows; 168 pupils for Luwangula house, 240 for Muteesa house and 192 pupils for Agakhan house. Each house then groups pupils with equal number.

(a) Find the largest number of pupils in each group.

(03 marks)



(02 marks)

(b) How many groups were formed by Muteesa house?

24 Kiplimo covered 800 metres in 96 seconds. Calculate his speed in km/h.

(04 marks)

25 The interior angle of a regular polygon is  $36^\circ$  more than the exterior angle.  
(a) How many sides has the polygon?

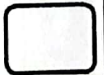
(02 marks)

(b) Calculate its interior angle sum.

(03 marks)

26 A carton of salt contains 40 packets. Each packet weighs 500g.  
 (a) Find the mass in kg of all the packets of salt in the carton. (02 marks)

(b) If the carton lasted a family 200 days. Find the number of days a packet of salt lasted a family. (02 marks)



27 Samadu is half his father's age. Eleven years ago, their total age was 50 years.  
 (a) How old is Samadu now? (02 marks)

(b) How old was the father eleven years ago? (03 marks)

28

The table below shows the buying and the selling rates in a bank.

Currency	Buying	Selling
USD dollar (\$) 1	Ush 3500	sh 3700
Euro (€) 1	Ush 4020	sh 4300
GBP (£) 1	Ush 4500	Sh 4700

(a) Convert US\$ 860 to Uganda shillings

(02 marks)

(b) Convert GBP 740 to US\$.

(03 marks)

29

Two maids Imelda and Amina are employed to clean a house. Amina takes 6 hours to clean the house while Imelda takes 2 hours to do the same work.

(a) Find the time the two maids will take to do the same work if they work together.

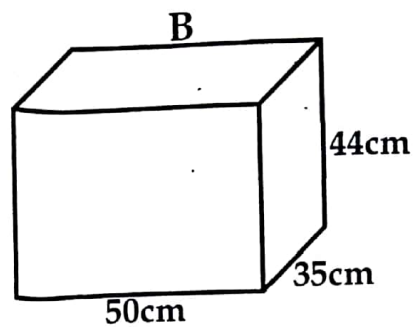
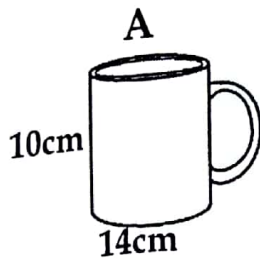
(03 marks)

(b) If each maid is paid sh.5000 per hour, how much money will be spent on the two maids.

(02 marks)

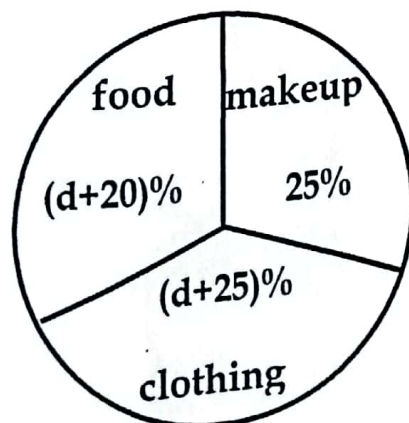


Small containers of size (A) were used to fill a big container of size (B) with water. Study the diagrams below and answer the questions that follow.

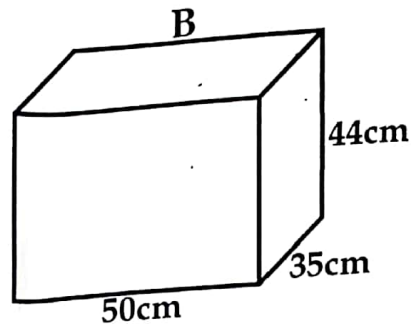
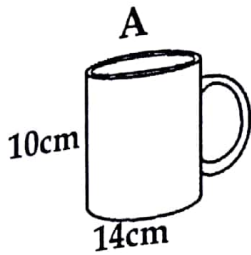


- (a) Find the number of containers of size A that can fill the big container (B) (03 marks)
- (b) If each small container was sold at sh.200 each. Find the total amount that would be collected. (02 marks)

- 31 The pie chart below shows how a woman spends her monthly salary.



Small containers of size (A) were used to fill a big container of size (B) with water. Study the diagrams below and answer the questions that follow.



(a) Find the number of containers of size A that can fill the big container (B) (03 marks)

(b) If each small container was sold at sh.200 each. Find the total amount that would be collected. (02 marks)

31 The pie chart below shows how a woman spends her monthly salary.



(a) Find the value of d.

(02marks)

(b) If she spends sh.45000 more on clothings than on food. Calculate the total amount of money the woman earns every month. (04 marks)

32 Using a ruler and a pair of compasses only, construct a kite WXYZ such that diagonal  $\overline{WY} = 5\text{cm}$ , diagonal  $\overline{XZ}$  bisects  $\overline{WY}$  at point p.  $\overline{PX} = 3\text{cm}$  and  $\overline{PZ} = 6\text{cm}$  (05 marks)

