



RAPHA EXAMINATIONS BOARD

P.7 EXAMINATIONS 2024

STANDARD PRE-MOCK SET 8

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MATHEMATICS

Time allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District Name:

Read the following instructions carefully:

1. The paper has two sections A and B.
2. Section A has 20 questions (40 marks)
3. Section A has 12 questions (60marks)
4. Answer all questions All answers to both Sections A and B must be written in the spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary changes in your work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the table indicated:
"FOR EXAMINER'S 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		
33 - 40		
41 - 50		
51 - 55		
TOTAL		

Turn Over

SECTION A (40 MARKS)

Answer all the questions in this section

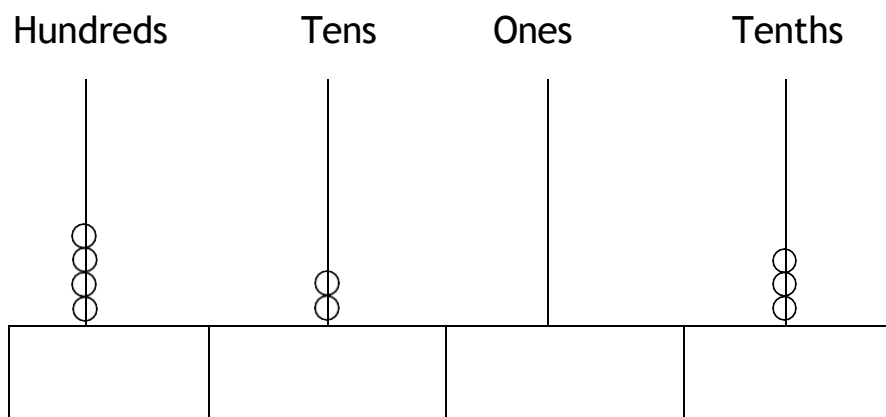
Questions 1 to 20 carry two marks each

1. Workout: $103 + 7$

2. Write in figures: Nineteen thousand, nineteen.

3. Given that $A = \{2, 3, 5, 7, 11\}$ and $E = \{1, 3, 6, 10, 15\}$. Find K .

4. Write the number shown on the abacus below



5. Show 3:37p.m on the clock below:



6. Simplify: $6k - 7k - k$

7. A lorry uses 6litres of petro to cover 30km. how many liters of Petro will be needed to travel 100km?

8. A pick-up carries 8.5 tons of maize flour to the market .Find the maximum number of bags weighing 50kg each pick-up can carry.



9. With the help of a ruler ,a pencil and a pair of compasses only, construct an angle of $37\frac{10}{2}$ in the space provided below.

10. Find the product of the next two numbers in the sequence:

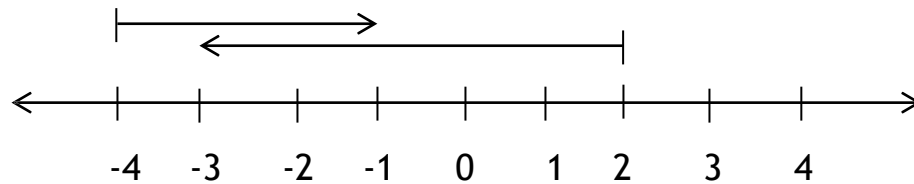
-27, -17, -13, -9, _____, _____

11. Workout: $(0.01 \times 800) - (700 \times 0.01)$

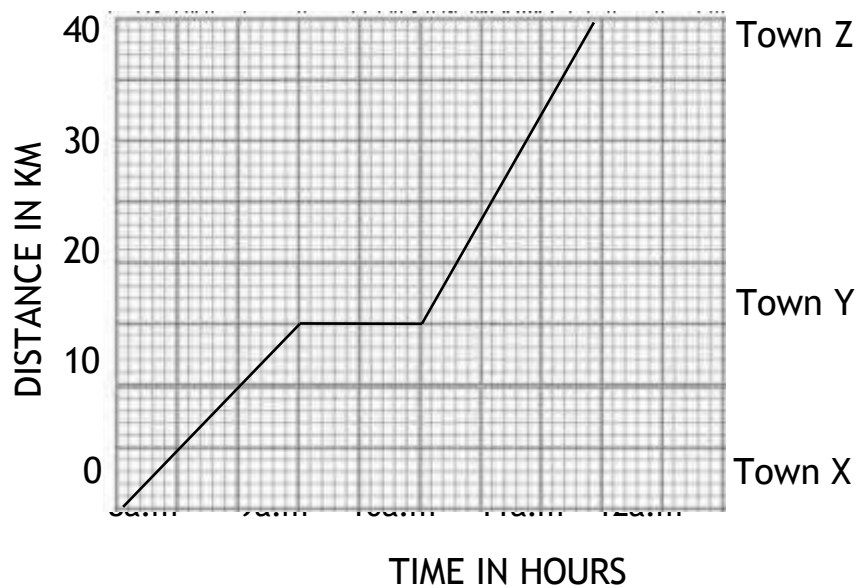
12. Round off 3.675 to the nearest tenths



13. Work out the difference of the integers shown on the number line below:



14. The travel graph below shows how Mata travelled from town X through town Y to town Z. Study it and use it to answer the question that follows;



Calculate Mata's average speed for the whole journey.



15. The average weight of 5 pupils is 45kg. When the sixth pupil joins the group, the average becomes 50kg. Work out the weight of the sixth pupil.

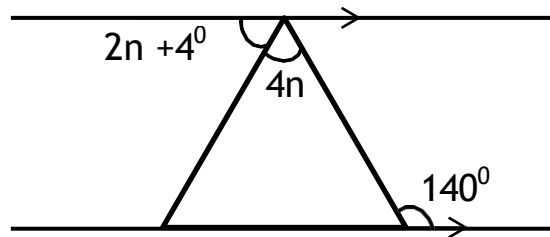
16. Decrease 40 sheep by $2\frac{1}{2}\%$.

17. Solve the inequality : $3(1 - x) < 6$

18. A man had some mangoes, when he grouped them in heaps of 6, 5 mangoes were left and when he grouped them in heaps of 7, 6 mangoes remained. How many mangoes did he have?



19. Find the size of n in degrees in the diagram below.



20. A customer paid us dollar 45 for a pair of shoes after being a discount Sh 57,750, what was the original price of shoes in Uganda shillings if 1 US dollar costs UG Sh 3,850?

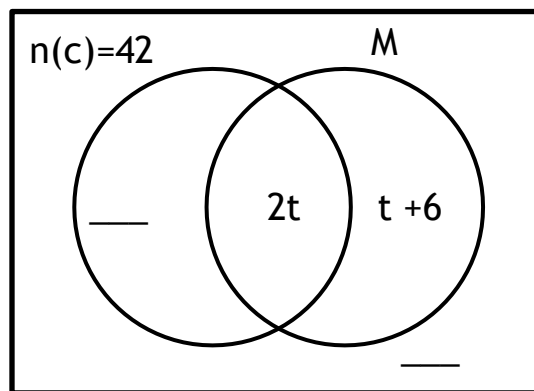
SECTIONB: 60 MARKS

Answer all questions in this section

Marks for each question are indicated in brackets

21. In a village, 42 farmers grow Coffee (C), $t+6$ farmers grow Maize (M) Only, $2t$ farmers grow both crops while 1 farmer grows neither of the crops.

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



- (b) If 27 farmers grow maize altogether, find the total number of farmers in the village. (03 marks)



22. (a) Express $0.3636\ldots$ as a common fraction in its simplest form. (02marks)

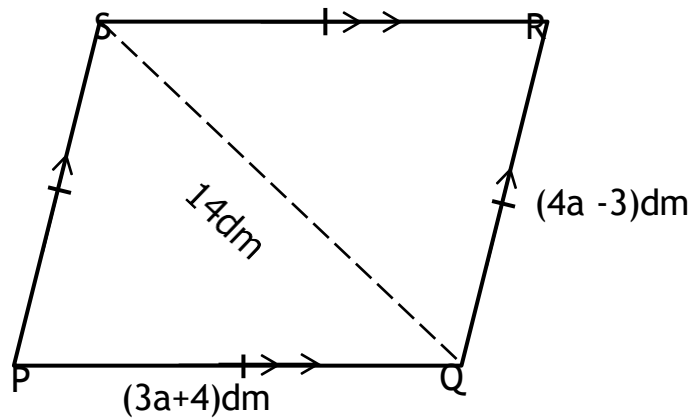
(b) Simplify: $\frac{4}{5} + \frac{1}{3} \times \frac{3}{5} - \frac{1}{4}$ of $\frac{2}{5}$ (03marks)

23. (a) Convert 45 to base three. (02marks)

(c) Given that $47_n = 133_{\text{five}}$. Find the value of n. (02marks)



24. The diagram bellow shows a quadrilateral PQRS. Study it and use it to answer the questions that follow.



- (a) Work out the perimeter of the Quadrilateral PQRS. (02marks)

- (b) Calculate the area of the Quadrilateral PQRS. (03marks)



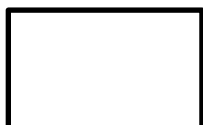
25. To bake 100 chapattis for sale, Mwesigwa has to buy the following items.

- (i) $3\frac{1}{2}$ liters of cooking oil at Sh 6,000 per litre
- (ii) 2 packets of wheat flour at Sh5,500 per packet
- (iii) 3 tins of charcoal at Sh 5,000 per tin
- (iv) Spices for Sh 3,000.

If Mwesigwa sold all the chapattis at Sh.700 each, calculate his percentage profit. (05 marks)

26. (a) Using a ruler, a pair of compasses and a pencil only construct a triangle RST such that RS=7cm, angleSRT=120⁰andRST=30⁰.

Construct a perpendicular line from T to meet RS at point M
(04marks)



(b) Measure the length of MT.....cm (01 mark)

27. The table below shows marks scored by P.7 pupils in mathematics test. Study and answer questions that follows:

Marks	60	80	70	d
Tallies	////	/	/	///

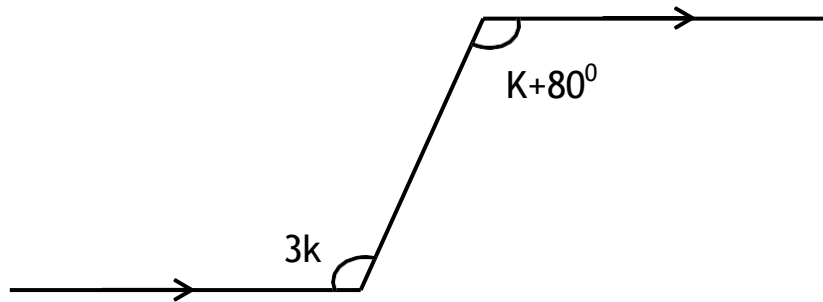
Find the value of d if the average mark was 74marks. (04marks)

28. (a) The interior angle of a regular polygon is 20% more than the exterior angle. Calculate the number of sides of the polygon. (03marks)

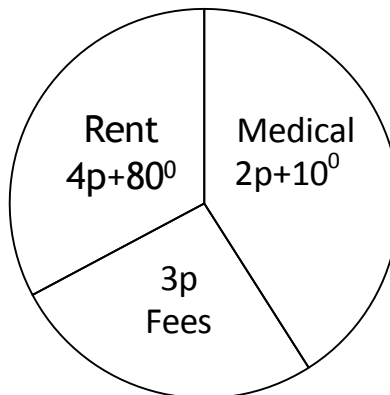


(b) Find the size of angle K in the diagram.

(02marks)



29. The pie-chart below shows how a family spends its income. Study it carefully and answer the questions that follow.



(a) If the family spends Sh 110,000 more on rent than, fees, find the total income of the family. (04 marks)



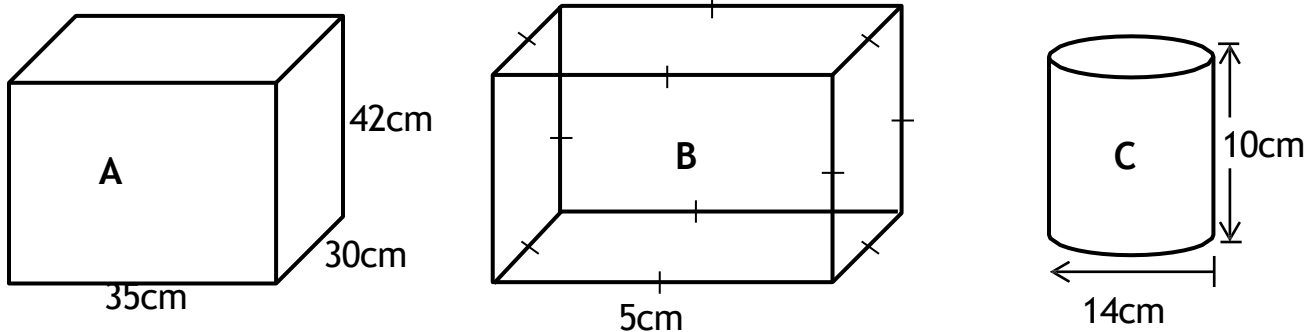
(b) How much does the family spend on medical and fees altogether.
(02marks)

30. (a) Solve: $\frac{1}{2}p + 7 = \frac{1}{3}p + 9$ (02marks)

(b) A farmer had 40 sheep on a farm. The number of goats is four times the number of cows on the farm. If there are 48 more goats than cows, find the total number of animals on the farm.
(03marks)



31. Study the diagrams below and use them to answer the following questions.



(a) How many layers of tin C can be filled in Prism A? (01mark)

(b) Find the number of cubes that can be packed in prism A (02marks)

(c) Calculate the volume of the space that can be left after packing cupful of tin (c) in Prism A. (Take $\pi = \frac{22}{7}$) (03 marks)



32. Three men Opio, Odong and Opeta shared land in the ratio of 8:5:7 respectively. Opio then sold $\frac{1}{4}$ of his land to Opeta. If opeta has 12

Acres more than Opio, find
how much land the three men
shared.

(5marks)



