

STEP-UP EXAMINATIONS BOARD

NATIONAL PRE-PLE SET ONE 2024

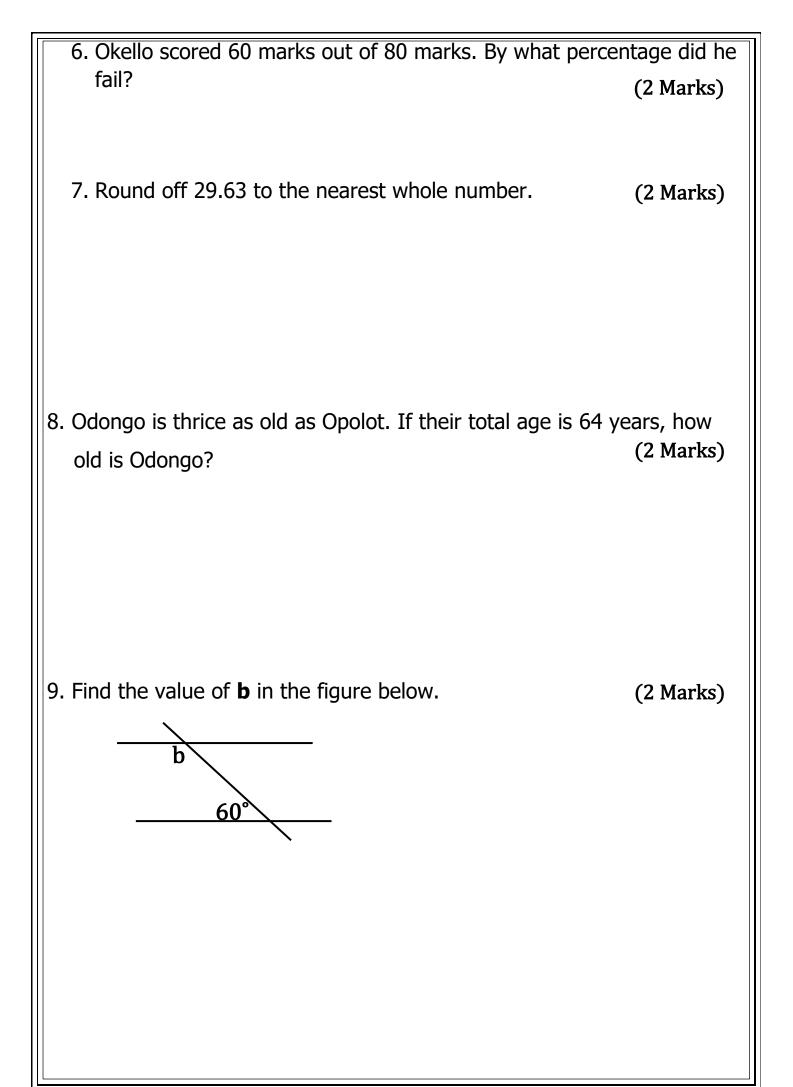
MATHEMATICS

Time allowed: 2 hours 30minutes

| Random No. | Per | sonal No. | |
|---|-------------------------|-----------|-----------|
| Danill's Norma | | | |
| Pupil`s Name Signature: | | | |
| School Name | | | |
| District Name | | | |
| Read the following instructions carefully; | | | |
| This paper has two sections: A and B . Section A has 20 questions and Section B has 12 questions. | FOR EXAMINERS' USE ONLY | | |
| <u>-</u> | QN. NO. | MARK | EXR`S NO. |
| . Answer all the questions. All the answers for both sections A and B | 1-5 | | |
| must be shown in the spaces provided. | 6 – 10 | | |
| . All working must be done using a blue | 11 – 15 | | |
| or black ball-point pen or fountain pen. Any work done in pencil other | 16 – 20 | | |
| than graphs, pictures and diagrams | 21 – 22 | | |
| vill not be marked. | 23 – 24 | | |
| . Unnecessary changes of work may lead | 25 – 26 | | |
| to loss of marks. | 27 – 28 | | |
| . Any handwriting that cannot easily be read may lead to loss of marks. | 29 – 30 | | |
| . Do not fill anything in the boxes | 31 – 32 | | |
| indicated: | TOTAL | | |
| "FOR EXAMINERS' USE ONLY" and | | | |

boxes inside the question paper.

| SECTION A 1. Workout: 48÷6. | (2 Marks) |
|--|--------------|
| 2. Change 0.8km to m. | (2 Marks) |
| 3. Express 954 in roman numerals. | (2 Marks) |
| 4. Workout: 93. | (2 Marks) |
| 5. How many lines of folding symmetry has the figure below | ow?(2 Marks) |



| 10. | Find the | greatest | common | factor | of 15,18 | and 24. |
|-----|----------|----------|--------|--------|----------|---------|

(2 Marks)

11. Kato bought 3 books at sh.2400.What is the cost of 7 similar books? (2 Marks)

12. Express <u>4</u> as a decimal fraction.

(2 Marks)

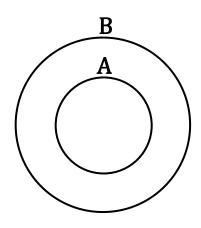
13. A bus travelled at an average speed of 60km/hr for 120 km.

Calculate the time taken in minutes.

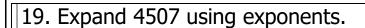
(2 Marks)

14.In the Venn diagram below, shade (AnB)=A

(2 Marks)



| 15. Ahebwa borrowed sh.900,000 from a bank that offers an | interest rate |
|--|-------------------------|
| of 5% per annum for 18 months. Find the simple interest months. | after 18 (2 Marks) |
| 16. A pupil rolled a dice once. What is the probability that a fir on top? | ve appears (2 Marks) |
| 17. A mathematics ended at 12:30 pm. If the lesson lasted fo minutes, at what time did it start? | r 55 (2 Marks) |
| 18. Find the 5th triangular number. | (2 Marks) |

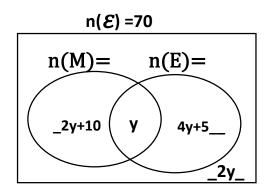


(2 Marks)

20. Using a ruler, sharp pencil and a pair of compasses only construct an angle of 75°. (2 Marks)

SECTION B: 60 MARKS

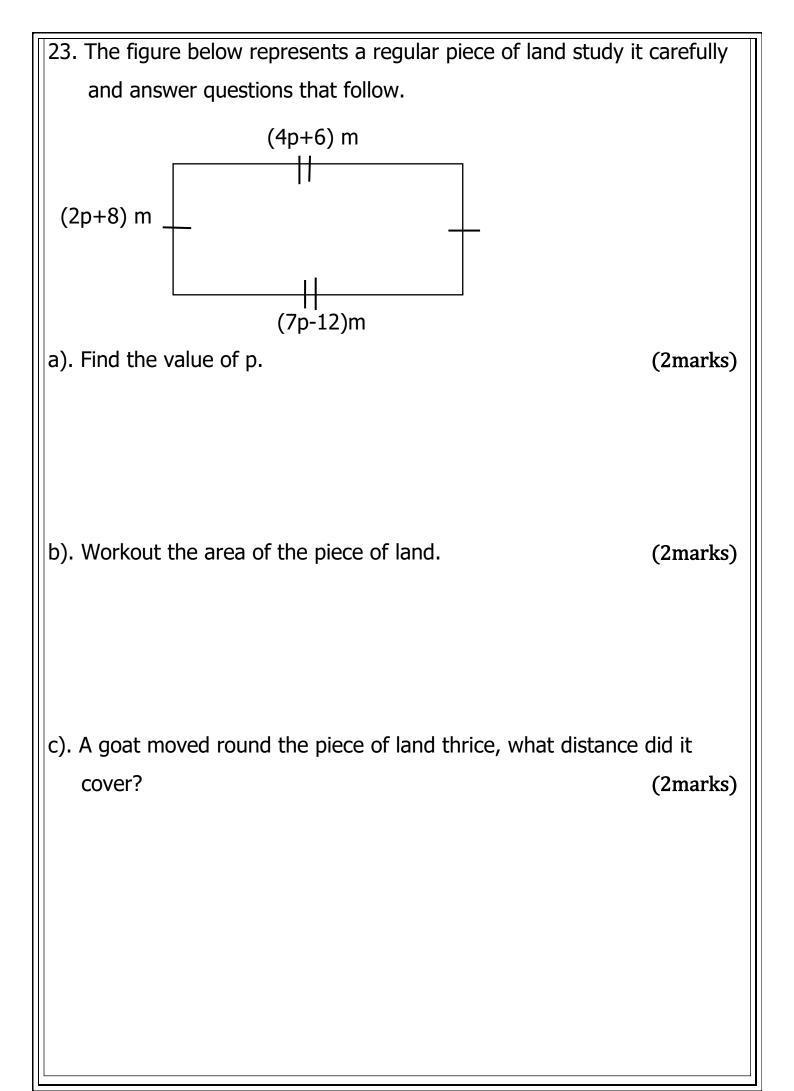
21. The Venn diagram bellow represents the number of pupils who like mathematics {M} and English {E}. Use it to answer the questions that follow



a). Find the value of y.

(3 mks)

| b). How many pupils do not like English? | (1 mk) |
|---|---------------------|
| c). If a pupil is picked at random, what is the probability that a pu at least one subject? | pil likes (2mks) |
| 22. a) Solve for x. 4(x-2)-2(x-6)=12. | (3mks) |
| b. Solve the inequality below. 2m-1<11. | (2mks) |
| | |
| | |



| 24. Mary, Mercy and Madrine shared a certain amount of money in the | | | | |
|---|----------|--|--|--|
| ratio 3:4:5 respectively, if mercy got sh. 200000. | | | | |
| a). Find the amount of money they shared altogether? | (2marks) | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| b). Express Mary's share as a percentage. | (2marks) | | | |
| by Express Fiary's share as a percentager | (2marks) | | | |
| | | | | |
| | | | | |
| | | | | |
| 25. The sum of four consecutive odd numbers is 88, | | | | |
| | | | | |
| a). Find the numbers. | | | | |
| | | | | |
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| | | | | |
| | | | | |
| b). Workout the median of the number. | | | | |
| | | | | |
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| | | | | |
| | | | | |

| 2 | 26. The table below represents the shopping bill of Mrs. Gere, study it |
|---|---|
| | and use it to answer questions that follow. |

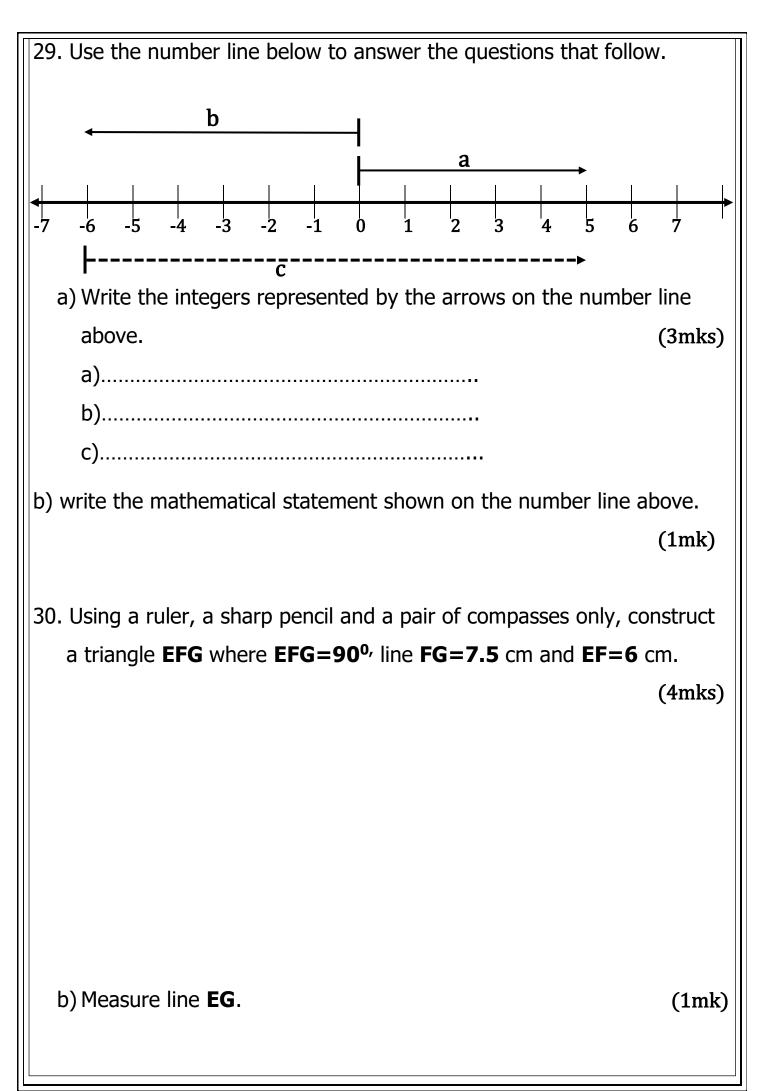
| ITEM | QUANTITY | UNIT COST | AMOUNT |
|-------------------|----------------------------------|--------------|-----------|
| Meat | $2^{1/2}$ kg | Sh.12,000@kg | Sh |
| Rice | 3 ¹ / ₄ kg | Sh@kg | Sh.13,000 |
| Cooking oillitres | | Sh.8000@ | Sh.6000 |
| Maize flour | 1500g | Sh.2000@kg | Sh |
| Total expendit | Sh | | |

a) complete the table above.

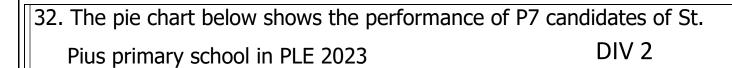
(5marks)

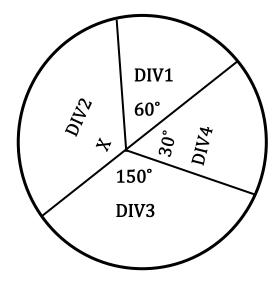
b) If she had sh. 70,000, how much money did she remain with. (1mark)

| 27. A motorist left town A at an average speed of 80km/hr for 2 | ^{1/} ₂ hours |
|--|----------------------------------|
| to town B . | |
| a) Find the total distance he covered from town A to town B . | (2mks) |
| b). If he returned from town A to town B at an average speed o | f |
| 50km/hr. How long did he take on his journey? | (2mks) |
| | |
| 28. The interior angle of a regular polygon is 100° more than its angle. | exterior |
| a) Find the exterior angle. | (2mks) |
| b). Calculate the its interior angle sum. | (3mks) |



| 31 a) Write 43056 in standard form. | (2mks) |
|---|--------|
| b). Given that 203y=125 _{six} , Solve for y. | (2mks) |
| | |





a) Find the value of X.

(2mks)

b) If 72 candidates passed in division 2, find the total number of candidates in P.7 that year? (3mks)

END