

EDUCATION SOURCE EXAMINATION BOARD 2024
OUR 2ND LAST SET
PRE-PRIMARY LEAVING EXAMINATION

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random Number						Personal No.		

Candidate's Name: _____

Candidate's signature: _____

School Random Number: _____ Branch: _____

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 **11 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 **blue** ball point pen or ink. Any work done in pencil other than graphs and diagram work 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 boxes inside the paper.

FOR EXAMINERS' USE ONLY		
PG.NO.	MARKS	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
TOTAL		

SECTION A (40 Marks)
Numbers 1 to 20 carry 2 marks each

1. Work out: $19 - 7$

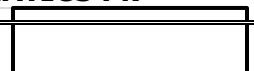
2. Simplify: $c - 3c + 6c$

3. Write **eight hundred fifteen** in figures.

4. Simplify: $\frac{7}{10} - \frac{1}{5}$

5. Work out: $-11 - -5$

6. Write the Roman numeral **XXII** in Hindu Arabic numerals.



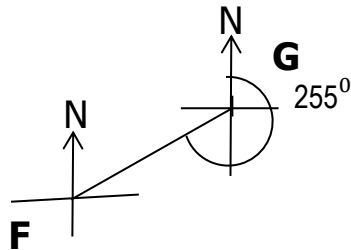
7. Change $1\frac{2}{5}$ kg to grams.

8. Find the next number in the sequence.

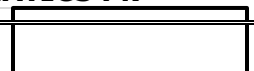
5, 6, 9, 15, 25, _____

9. The time is 12:45 am. What time is it on the 24-hour clock system?

10. The diagram below shows the bearing of **F** from **G**. Find the bearing of **G** from **F**.

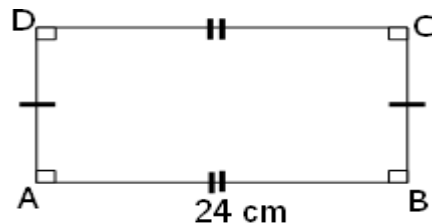


11. Solve for y : $3(y - 1) = 12$



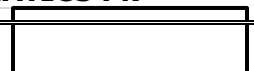
12. Nabirye bought 11 hens at Sh. 165,000. At what price must she sell each hen in order to raise a total profit of Sh.55,000?

13. In the figure below, line $BD = 25$ cm and line $BA = 24$ cm. Find the area of the figure.



14. A meeting lasted 300 minutes. How many hours did the meeting take?

15. A school has 26 classrooms. If the average number of pupils per class is 45, find the total number of pupils in the school.



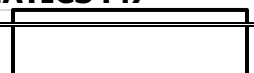
16. Simplify: $\frac{4.2}{0.7}$

17. In a basket there are 20 fruits. 8 are mangoes, 5 are oranges and the rest are apples. What is the probability of picking an apple from the basket?

18. Set **G** has 63 proper subsets.
Find $n(\mathbf{G})$

19. Find the GCF of 12 and 20.

20. With the help of a ruler, sharp pencil and a pair of compasses only, construct an angle of 135° in the space below.



SECTION B: 60 MARKS

Answer all questions in this section

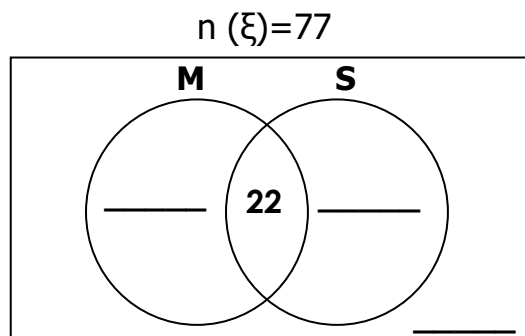
Marks for each Question are indicated in the brackets.

21. The sum of three consecutive numbers is 63. Find the product of the numbers.

(05 marks)

22. A class has 77 candidates. Out of these, 22 passed both mathematics and science. 50 passed mathematics (M), and 47 passed English (E).
d candidates failed both subjects.

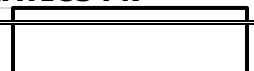
(a) Complete the Venn diagram below



(03 marks)

- (b) Find the value of d

(02 marks)



23. Kakai went shopping and after buying the items below she remained with Sh. 2,000.

2 litres of milk, each at Sh.1,800

$\frac{1}{2}$ kg of sugar at Sh.4,800 per kg.

2 bars of soap at Sh.6,000 a bar

(a) How much money did she spend on all the items?

(04 marks)

(b) Find the amount of money Kakai had before shopping?

(02 marks)

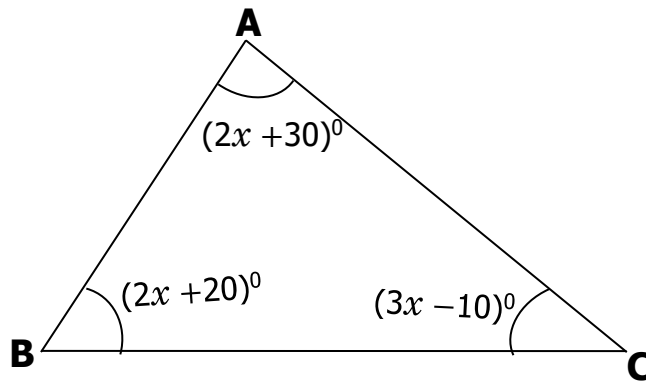
24. (a) Given that $x = 3$ and $y = 1\frac{1}{2}$. Find the value of $\frac{x}{y}$.

(02 marks)

(b) Solve: $7p - 11 = 9 - 3p$

(03 marks)

25. Study the figure and answer questions (a) and (b) that follow.



(a) Find the value of x

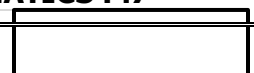
(03 marks)

(b) Work out the size of angle ACB

(02 marks)

26. Kakwezi used a cylindrical jug with a radius of 10 cm and a height of 7 cm to supply milk to 15 families, each getting one full jug of milk. How many litres of milk did Kakwezi supply in total? (Use π as $\frac{22}{7}$)

(04 marks)



27. A cyclist left town X for Z via Y at 7:00 am, travelling at an average speed of 10 km/ h. He reached town Y in 3 hours, stopped for 30 minutes, then continued 20 km to Z.

(a) At What time did the cyclist arrive at town Z?

(03 marks)

(b) Calculate the total distance covered by the cyclist over the whole journey.

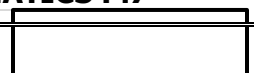
(02 marks)

28. (a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a parallelogram KLMN in which angle $KLM=60^\circ$, line $LM=7$ cm and line $MN=5$ cm.

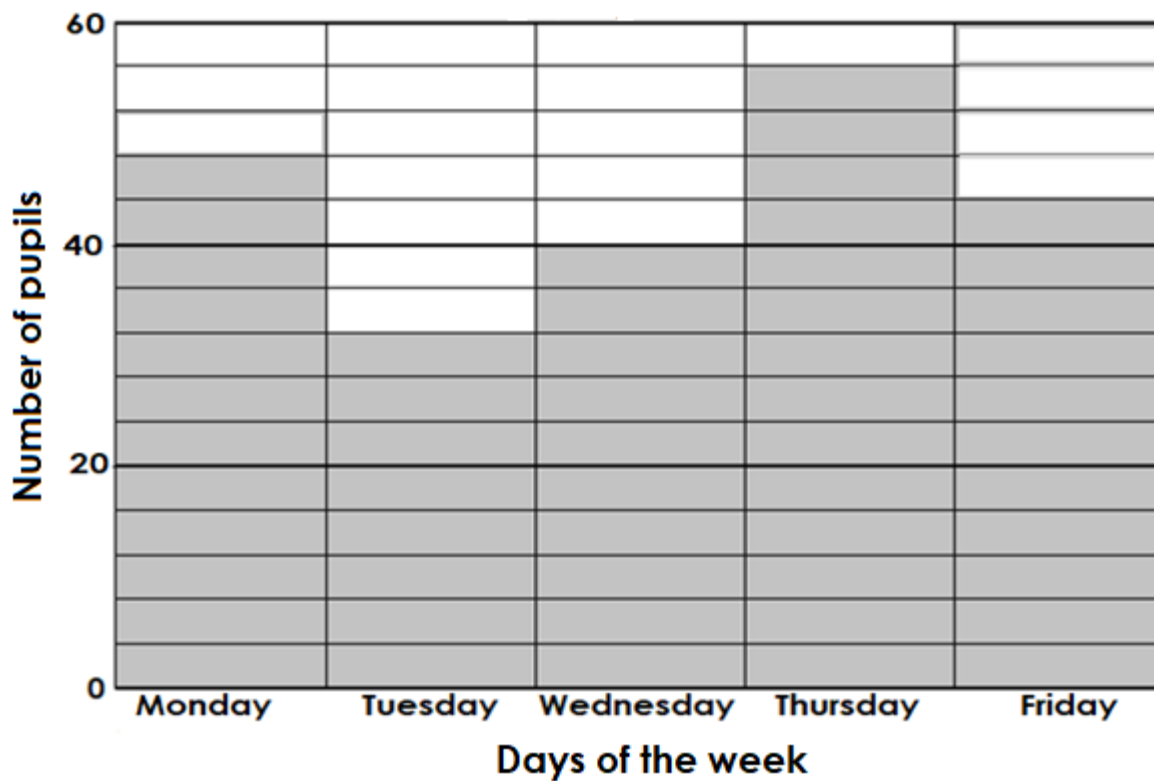
(04 marks)

(b) Measure the length of diagonal LN = _____

(01 mark)



29. The graph below shows the number of pupils present in a class of 60 pupils in a certain week. Study it and answer the questions that follow.



(a) Find the number of pupils who were absent on Tuesday.

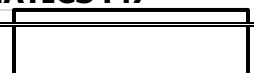
(01 mark)

(b) What percentage of the class was present on Monday?

(02 marks)

(c) Calculate the average daily attendance for the week.

(02 marks)



30. Alex, Cindy, and Job contributed money in the ratio 2:3:5 respectively, to pay for Brenda's school fees. Job contributed Sh.500,000.

(a) Find the total amount of Brenda's school fees.

(03 marks)

(b) How much money did Cindy contribute?

(02 marks)

31. Square tiles with sides of 30 cm are required to cover a rectangular floor measuring 6 metres in length and 4.5 metres in width.

(a) Calculate the total number of tiles required to cover the floor.

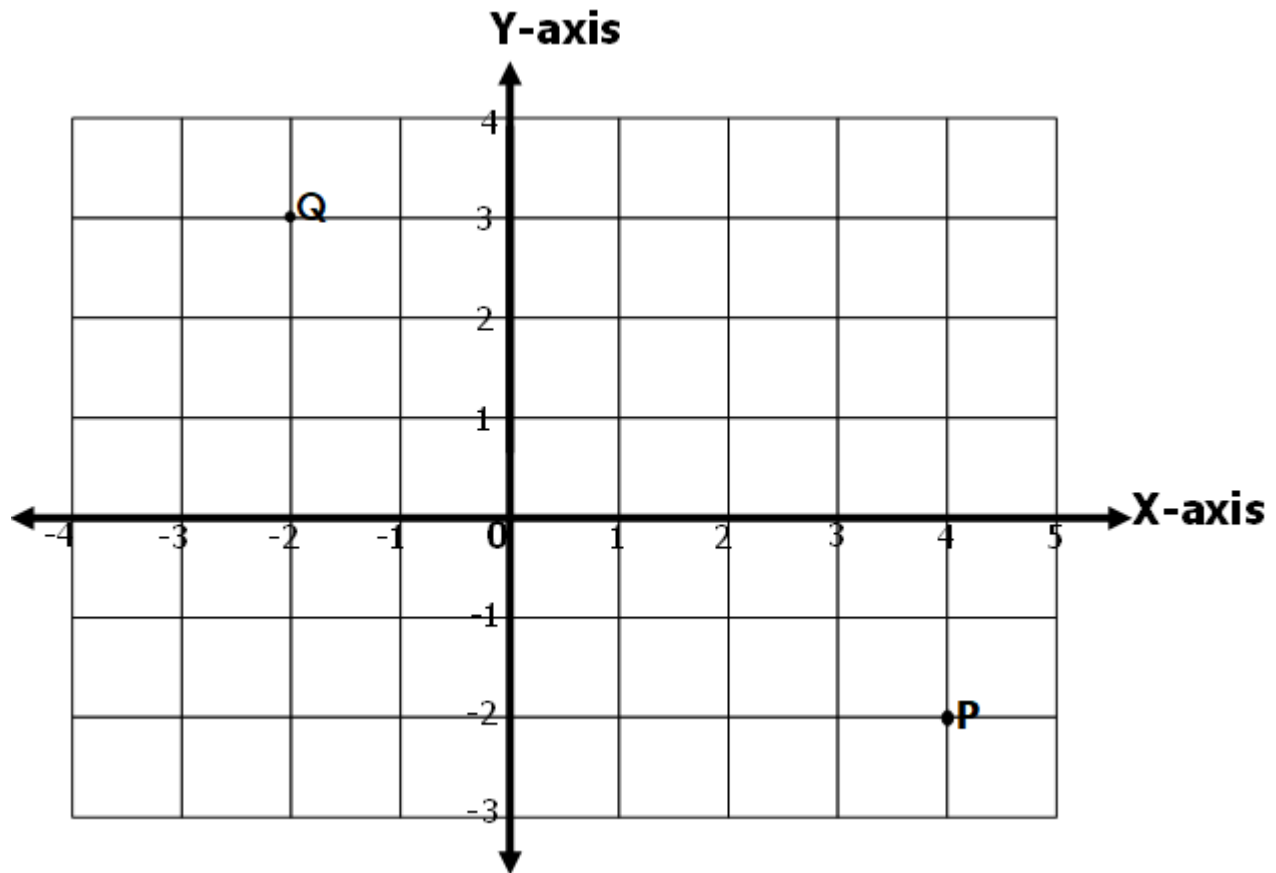
(03 marks)

(b) If 12 tiles are packed in a box, find the number of boxes of tiles used to cover the floor.

(02 marks)



32. Study the coordinate graph below carefully and use it to answer questions (a), (b) and (c) that follow.



- (a) Plot point R (0, -2) on the graph.

(01 mark)

- (b) Write down the coordinates of points;

i) **P**

(01 mark)

ii) **Q**

(01 mark)

- (c) Join the points to form a polygon, and then find the area of the polygon formed.

(02 marks)

