

MATHEMATICS EXAMINATION PAPER 2

GRADE 7

TERM 4 NOVEMBER 2024

MARKS: 50

DURATION: $1\frac{1}{2}$ HOURS

CIRCUIT	
SCHOOL NAME	
CLASS (e.g. 6 A)	
NAME & SURNAME	
DATE	_____ NOVEMBER 2023

GENDER (✓ i)

DATE OF BIRTH

BOY	GIRL
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y	y	y	y	m	m	d	d
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Instructions to learners:

1. Read all instructions carefully.
2. This paper consists of **10 pages** including the cover page.
3. Question **1** consists of **6 multiple choice** questions. Circle the letter next to the correct answer.
4. Answer **Question 2 – 7** in the spaces or frames provided.
5. Show all working (where necessary).
6. The use of calculators is not allowed.
7. Write neatly and legibly.

SECTION A: MULTIPLE CHOICE QUESTIONS

Question 1

[6]

Circle the letter of the correct answer.

1.1 A triangle that has all three sides equal is called _____. (1)

A. Isosceles Triangle

B. Equilateral Triangle

C. Scalene Triangle

D. Right-angled triangle

1.2 A _____ is a line with a definite starting point and has no end point. (1)

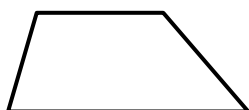
A. Line segment

B. Parallel line

C. Perpendicular line

D. Ray

1.3 What is the name of the quadrilateral below? (1)



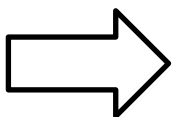
A. Parallelogram

B. Rhombus

C. Trapezium

D. Kite

1.4 The figure below has _____ line/s of symmetry. (1)



A. 1

B. 2

C. 3

D. 4

1.5 If the length of a rectangle is 6cm and its breadth is 4cm , what is its perimeter? (1)

A. 24cm

B. 10 cm

C. 20 cm

D. 2 cm

1.6 The following data set shows the marks of Mathematics test for Grade 7 learners. (1)
[25; 32; 44; 34; 21; 25; 32; 25]. What is the mode of the data set given?

A. 44

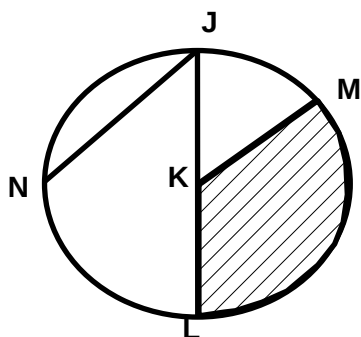
B. 34

C. 32

D. 25

SECTION B: FREE RESPONSE QUESTIONS

- 2.1 In the circle below, K is the centre of the circle. Study the circle and complete the statements below:



2.1.1. JL is called the _____ (1)

2.1.2. JN is called the _____ (1)

2.1.3. _____ KM _____ is _____ called the _____ (1)

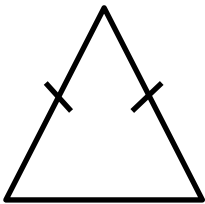
- 2.2 Define the following terms:

2.2.1 Line segment (1)

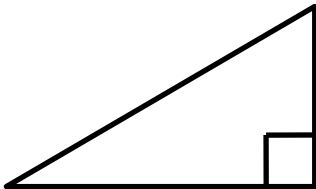
2.2.2 Perpendicular lines (1)

2.2.3 Parallel lines (1)

3.1 Classify the triangles below and complete the statements that follow:



Triangle A



Triangle B

3.1.1 Triangle A is an (1)

3.1.2 Triangle B is a (1)

3.2 Classify the quadrilaterals. Write the name of the quadrilateral in the space provided.

3.2.1 (1)

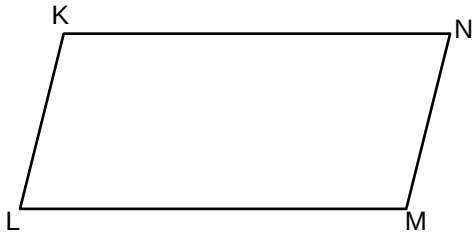
3.2.2 (1)

3.3 Look at the following 2D shapes and answer the question below:

Group A	Group B	Group C

3.3.1 Which group has a pair of similar 2D shapes? _____ (1)

3.4 Study the quadrilateral below and answer questions that follow.



3.4.1 What type of quadrilateral is KLMN? _____ (1)

3.4.2 Which side is equal to KL? _____ (1)

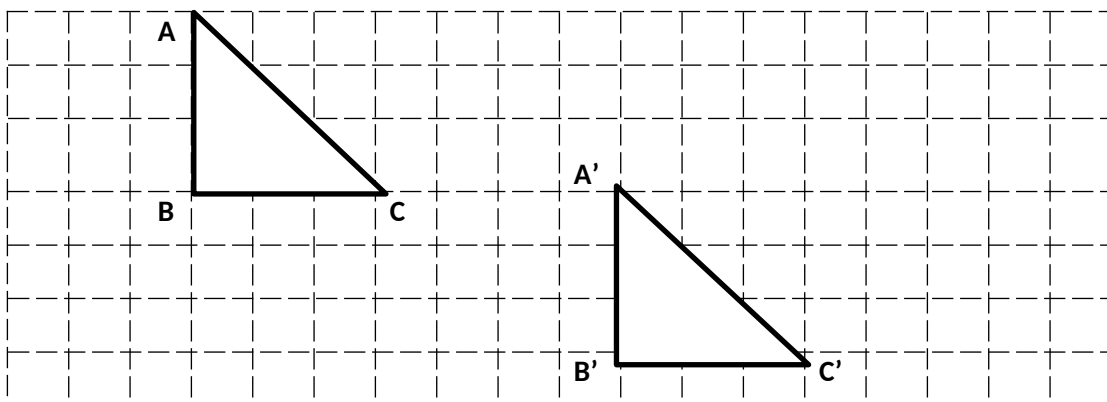
3.4.3 What is the length of LM? _____ (1)

Question 4 – Transformation Geometry

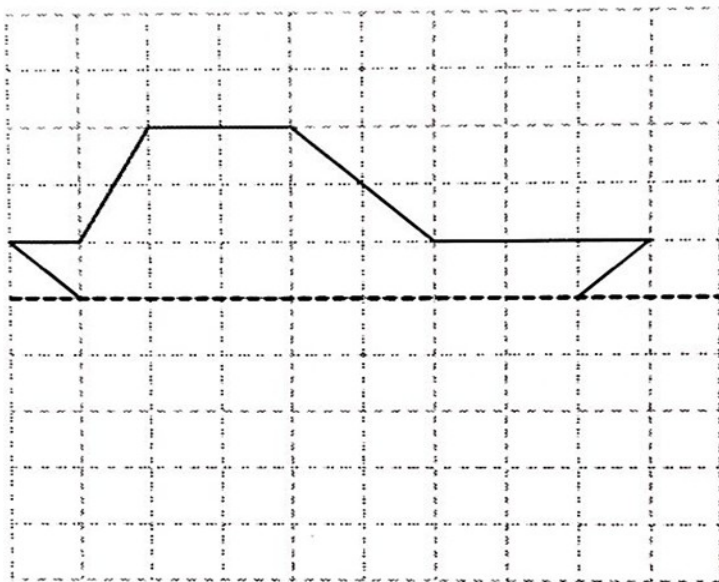
[7]

4.1 Study the shapes below and answer the questions that follow.

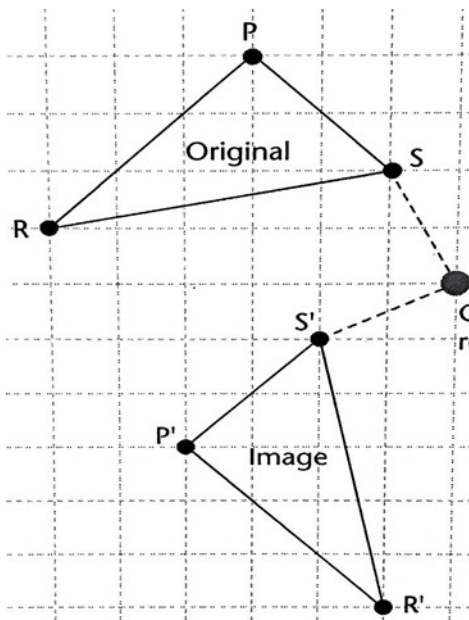
4.1.1 The triangle ABC has been translated into triangle A'B'C' on a grid. Describe the transformation that has taken place. (1)



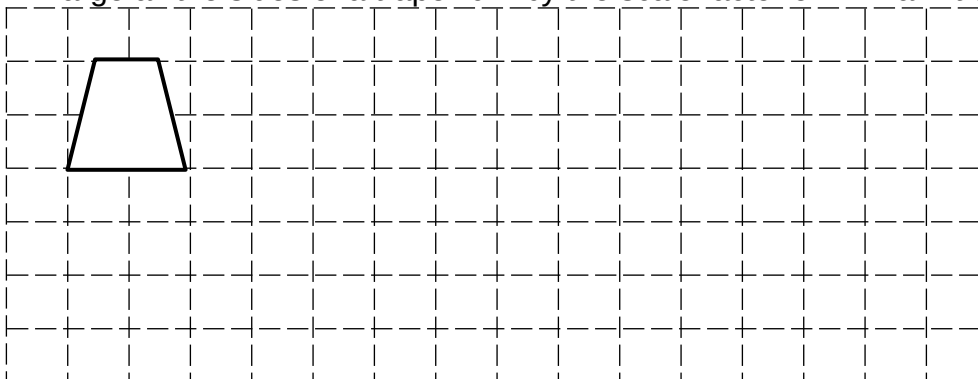
4.1.2 Draw the reflection of the figure below about the given line of reflection. (1)



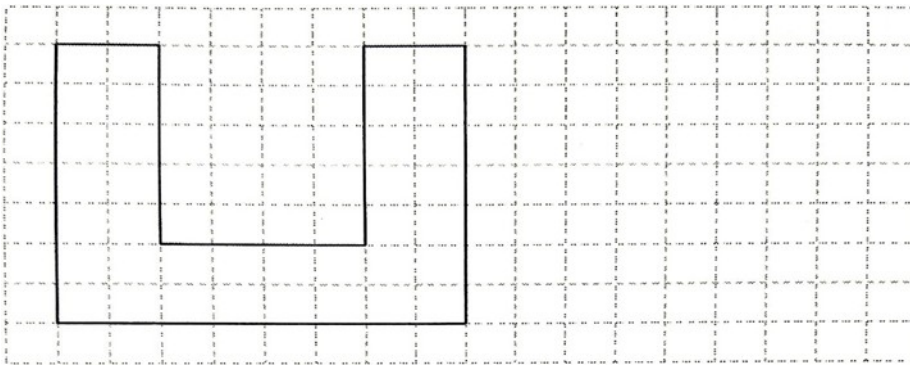
4.1.3 Recognize the original triangle and its image. State the type of transformation used to move the triangle from position 1 to position 2. (1)



4.2 Enlarge all the sides of a trapezium by the scale factor of 2. Draw it on the grid. (2)



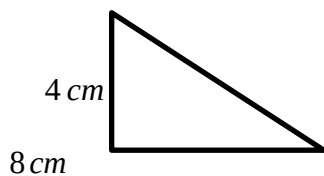
- 4.3 Resize the shape below using the scale factor of **0,5**. Draw the reduction of the shape (2)



Question 5 – Area and Perimeter of 2D shapes

[8]

- 5.1 Calculate the area of a triangle below. (3)



- 5.2 Convert the units of area:

5.2.1 $6 \text{ cm}^2 = \underline{\hspace{2cm}} \text{ mm}^2$ (1)

5.2.2 $3 \text{ m}^2 = \underline{\hspace{2cm}} \text{ cm}^2$ (1)

- 5.3 A rectangle is 5 cm wide. The area of the rectangle is 35 cm^2 . Calculate the perimeter of the rectangle? (3)

Question 6 – Surface Area and Volume of 3D objects

[8]

- 6.1 Calculate the volume of the cube if its length is 4 mm. (2)

- 6.2 The surface area of a cube is 150 cm^2 . Calculate the volume of a cube? (4)

- 6.3 Convert the following:

6.3.1 $3000\,000 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ m}^3$ (1)

6.3.2 $60 \text{ cm}^3 = \underline{\hspace{2cm}} \text{ ml}$ (1)

Question 7 – Data Handling

[7]

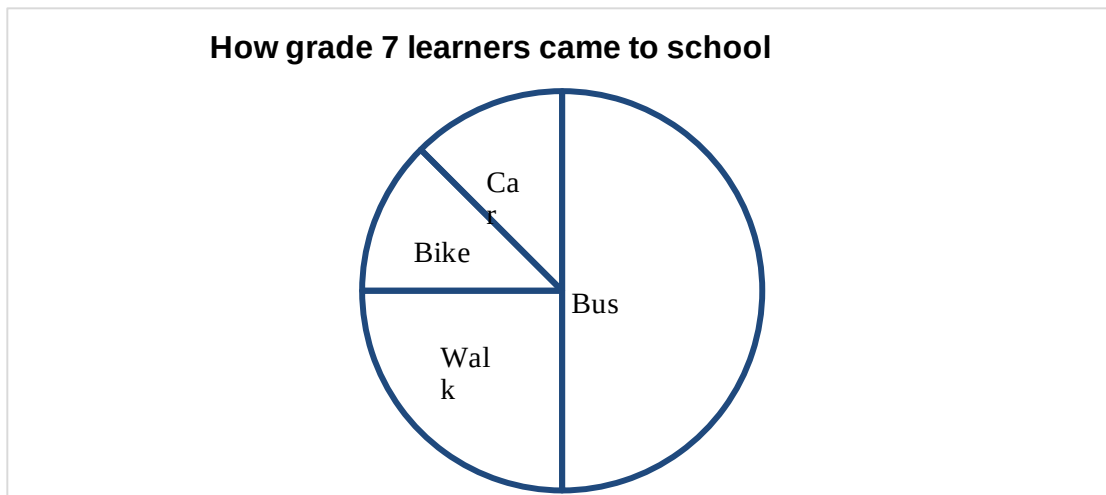
The data set below shows the marks of Maths test for grade 7 learners. Display the data in a stem and leaf.

7.1

(1)

120 learners in Grade 7 were asked how they came to school, and a pie graph was drawn to illustrate the results. Study the pie chart and answer the questions below.

7.2



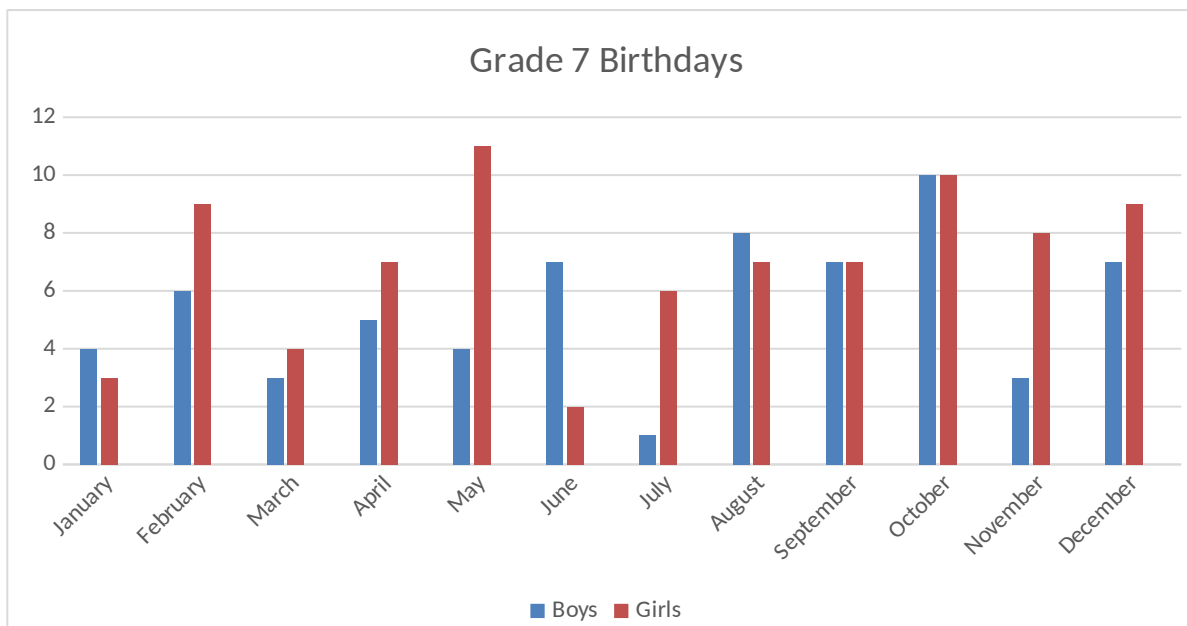
7.2.1 What fraction of learners walked to school?

(1)

7.2.2 How many learners come to school by bus?

(1)

7.3 Grade 7 learners were asked to graph their birthday months. Study the graph below and answer the questions that follow.



7.3.1 How many learners have their birthdays in October? (1)

7.3.2 Which month has the highest number of girls? (1)

7.3.3 Which month has the least number of boys? (1)

7.3.4 How many girls have birthdays in June? (1)

TOTAL: 50 MARKS