



GAUTENG PROVINCE

Department: Education

REPUBLIC OF SOUTH AFRICA

**GAUTENG DEPARTMENT OF EDUCATION
PROVINCIAL EXAMINATION
NOVEMBER 2021
GRADE 6**

MATHEMATICS

DISTRICT:

SCHOOL NAME:

NAME AND SURNAME:

CLASS (e.g. 6A):

TIME: 1 hour

MARKS: 40

13 pages

INSTRUCTIONS

1. Read ALL the instructions carefully.
2. QUESTION 1 consists of 15 multiple choice questions. Circle the letter of the correct answer.
3. Answer QUESTIONS 2 to 5 in the spaces or frames provided.
4. All calculations must be shown on the question paper and may NOT be done on separate rough paper.
5. Write neatly and legibly.
6. You may NOT use a calculator.

Question	1	2	3	4	5
Topic	Multiple Choice	Measurement	Geometry	Data Handling	Problem Solving
Maximum mark	15	10	8	4	3
Learner's mark					
Total					

QUESTION 1: MULTIPLE CHOICE QUESTIONS

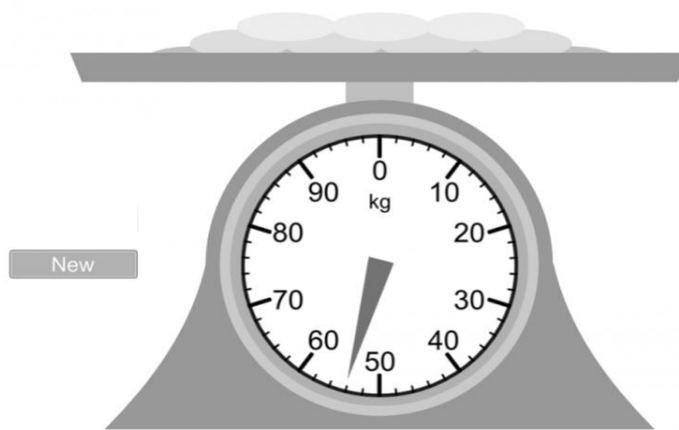
Four options are provided as possible answers to the following questions. Choose the correct answer and circle the letter of the correct answer.

1.1 Convert 15,05 litres to millilitres.

- A 1 505 ml
- B 150,5 ml
- C 15 050 ml
- D 15 005 ml

(1)

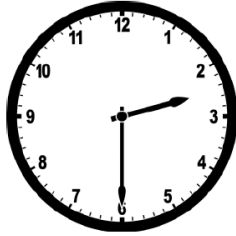
1.2 What is the mass of the bags on the scale?



- A 55 kg
- B 52 kg
- C 50,2 kg
- D 54 kg

(1)

- 1.3 The clock shows the time in the afternoon. What is the correct time in 24-hour time format?



- A 14:30
- B 14:06
- C 2:30
- D 2:06

(1)

- 1.4 What is the approximate length of a normal car?



- A $4\frac{1}{2}$ m
- B 45 cm
- C 405 mm
- D 40 m

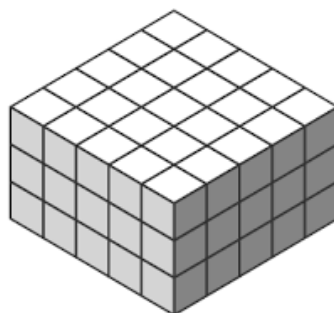
(1)

- 1.5 Calculate: 1,5 litres + 170 millilitres.

- A 1,517 litres
- B 1,67 litres
- C 15 170 millilitres
- D 1 517 millilitres

(1)

1.6 What is the volume of the prism in cubic units?



- A 75 cubic units
- B 55 cubic units
- C 25 cubic units
- D 15 cubic units

(1)

1.7 How many sides does a heptagon have?

- A 5
- B 6
- C 7
- D 8

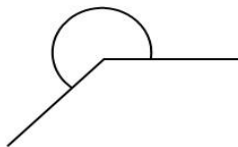
(1)

1.8 Which transformation below shows a translation?

- A
- B
- C
- D

(1)

1.9 Identify the marked angle below.



- A Reflex angle
 - B Obtuse angle
 - C Revolution
 - D Acute angle
- (1)

1.10 Which 3-D object has 5 faces and 6 vertices?

- A Rectangular prism
 - B Pentagonal prism
 - C Rectangular pyramid
 - D Triangular prism
- (1)

Use the pie chart below showing learners' favourite athletics events to answer QUESTIONS 1.11 and 1.12.



1.11 Which is the most popular athletic event at this school?

- A Hurdles
 - B Javelin throw
 - C Discus throw
 - D Running
- (1)

1.12 If 200 learners chose hurdles, how many learners took part in the survey altogether?

- A 200
 - B 800
 - C 400
 - D 50
- (1)

1.13 Which data deal below is the best value for money?

- A 3 GB of data for R90
- B 4 GB of data for R100
- C 2 GB of data for R80
- D 5 GB of data for R150

(1)

1.14 A recipe uses 50 g of flour with 10 g of baking powder. How much baking powder must be added to 300 g of flour?

- A 50 g
- B 60 g
- C 260 g
- D 310 g

(1)

1.15 A bucket filled with sand has a total mass of 750 g. If the bucket is half full of sand, the mass is 450 g. What is the mass of the bucket?

- A 300 g
- B 375 g
- C 600 g
- D 150 g

(1)
[15]

QUESTION 2: MEASUREMENT

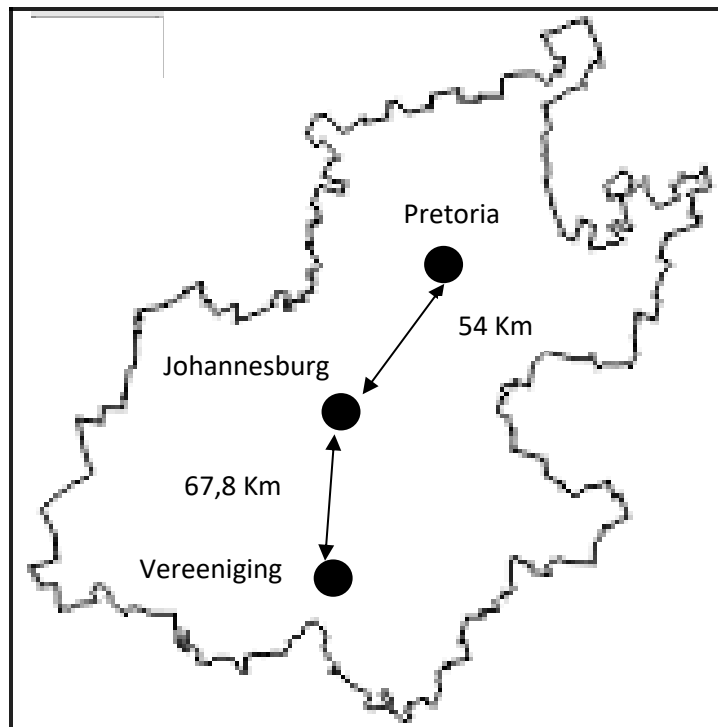
Answer the following questions in the spaces provided.

2.1 What is the combined mass of the 3 objects?



(2)

- 2.2 Use the map below to calculate the difference between the distance from Johannesburg to Vereeniging and from Johannesburg to Pretoria.

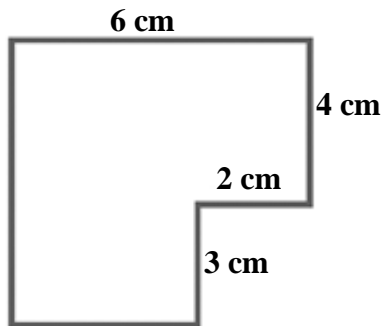


(2)

- 2.3 Calculate how long it took the runner to complete the Comrades Marathon.
 Start time: 5:30 a.m.
 Finish time: 1:45 p.m.

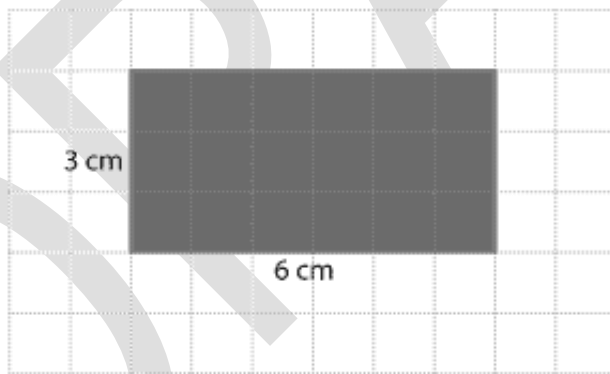
(2)

2.4 What is the perimeter of the following shape?



(2)

2.5 Calculate the area of the rectangle.

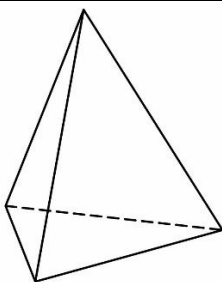


(2)
[10]

QUESTION 3: GEOMETRY

Answer the following questions in the spaces or frames provided.

3.1 Complete the table below.

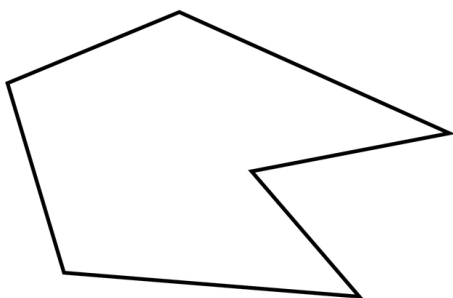
	
Name of object	
Number of faces	
Number of vertices	

(3)

3.2 Name the quadrilateral which has opposite sides equal and parallel, with 2 acute angles and 2 obtuse angles.

(1)

3.3 Identify the 2-D shape below:



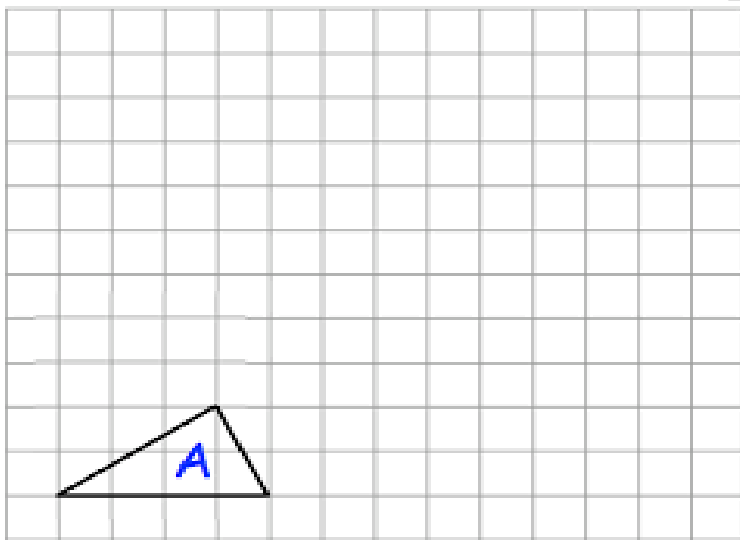
(1)

3.4 Draw the line/lines of symmetry on the shape.



(1)

3.5 Enlarge triangle A by a scale factor of 2.



(2)
[8]

QUESTION 4: DATA HANDLING

Answer the following questions in the spaces or frames provided.

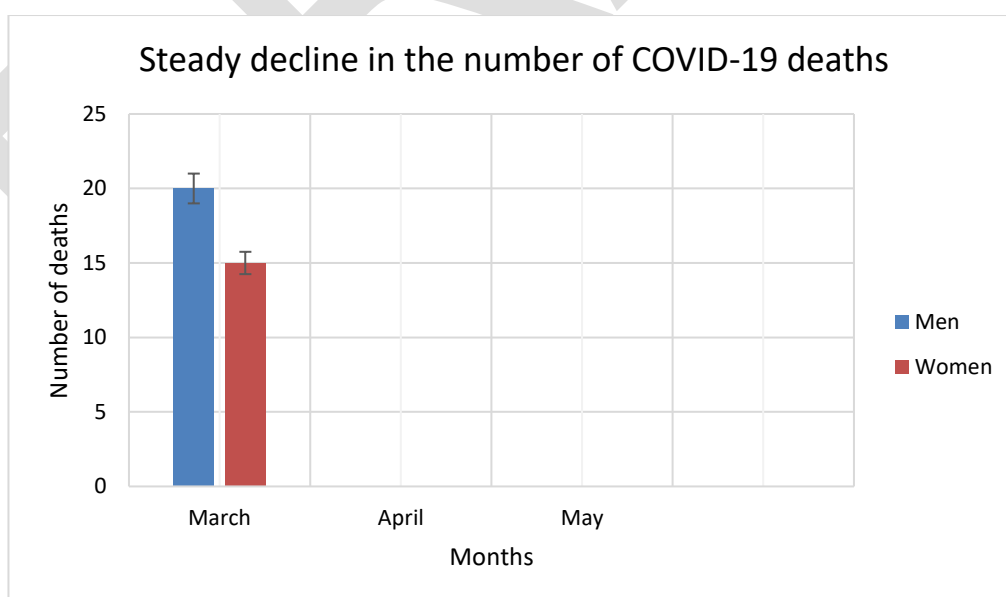
4.1 Study the information below and complete the tally table.

The rate of COVID-19 infections shows a steady decline in the number of daily deaths between March to May 2021.

Month	Tally		Total number of deaths
	Number of deaths: Men	Number of deaths: Women	
March	 	 	
April		 	30
May	 	 	20

(2)

4.2 Draw the double bar graph to represent the information in the completed tally chart above.



(2)
[4]

QUESTION 5: PROBLEM SOLVING

Answer the following questions in the spaces or frames provided.

5.1 A farmer has about 250 acres of land. He plants apples on $\frac{1}{5}$ of his farmland and bananas on $\frac{3}{10}$ of the farmland.

- (a) Calculate what fraction of the farmland is used for planting the two types of fruits mentioned above?

(2)

- (b) The farmer purchases another 50 acres of land to plant maize. What fraction of the new farm area is now being used to farm apples?

(1)

[3]

TOTAL: 40

END