

SMARTWIZ

GRADE 5 MATHEMATICS EXAM

MARKS: 50

MARKS

TIME: 1 hour

SCHOOL _____

CLASS (e.g. 4A) _____

SURNAME _____

NAME _____

MYST PATHWORKS

Instructions for Students:

- > Read all instructions carefully before beginning the exam.
- > Write your name and student ID clearly on the answer sheet/booklet.
- > Answer all questions unless otherwise stated.
- > Show all your work/calculations where applicable.
- > Write clearly and legibly.
- > Use blue or black ink only. * Do not use correction fluid/tape.
- > No electronic devices (calculators, phones, etc.) are allowed unless explicitly permitted.
- > Raise your hand if you have any questions.
- > Do not talk to other students during the exam.
- > Any form of cheating will result in disqualification.

This test consists of 6 pages, excluding the cover page.

SECTION A: Multiple Choice (Questions 1–10) [10 × 2 = 20 marks]

Choose the correct answer. Write down only the letter (A, B, C, or D).

What is the value of $15 \div 3 + 4 \times 2$

- A. 13
- B. 14
- C. 11
- D. 12

Which number is not a prime number?

- A. 7
- B. 11
- C. 15
- D. 13

What is the product of 24 and 3?

- A. 81
- B. 72
- C. 64
- D. 76

Which of the following is equivalent to 0.75?

- A. $\frac{3}{5}$
- B. $\frac{3}{4}$

C. $\frac{2}{3}$

D. $\frac{5}{6}$

A shape with five sides is called a:

A. Hexagon

B. Octagon

C. Pentagon

D. Trapezium

What is 25% of 200?

A. 25

B. 40

C. 50

D. 75

What is the expanded form of 4,208?

A. $4000 + 200 + 8$

B. $4000 + 20 + 8$

C. $4000 + 200 + 0 + 8$

D. $4200 + 8$

How many millilitres are there in 1.75 litres?

A. 1,075 ml

B. 1,750 ml

- C. 175 ml
- D. 2,000 ml

What type of angle is 135° ?

- A. Acute
- B. Reflex
- C. Right
- D. Obtuse

Which value is the median in this list: 6, 9, 4, 7, 10?

- A. 6
- B. 7
- C. 9
- D. 8

SECTION B: Short Answer (Questions 11–15) [5 × 4 = 20 marks]

Write the answers clearly. Show your calculations.

Write 6,509 in words.

Multiply:

$$243 \times 6$$

Convert 2.25 km to metres.

Simplify the fraction $\frac{12}{16}$

Find the area of a rectangle with a length of 9 cm and width of 7 cm.

SECTION C: Word Problems (Questions 16–20) [$5 \times 6 = 30$ marks]

Solve the following and show your working.

Thuli earns R85 per day. How much will she earn in 12 days?

A rope is 4.5 m long. If it is cut into 3 equal pieces, how long is each piece?

A box contains 6 red pens, 8 blue pens, and 10 black pens. What fraction of the pens are black?

A farmer harvested 1,350 apples. He packed them into boxes of 15. How many full boxes can he pack?

Lunga used 2.75 L of juice for a party. If he had 5 L at the start, how much is left?

SECTION D: Geometry and Patterns (Questions 21–24) [4 × 5 = 20 marks]

Draw a regular hexagon and label all sides and angles equal. (Use a ruler.)



Name two 3D shapes and write down:

Number of faces

Number of edges

Number of vertices

Complete the number pattern:

35, 30, 25, __, __, __

A triangle has angles measuring 40° , 65° , and ____°.

Fill in the missing angle.

SECTION E: Data Handling (Questions 25–26) [2 × 5 = 10 marks]

The table below shows how many books 4 learners read in a month:

Learner	Books Read
Aisha	12
Ben	8
Carlos	15
Dineo	10

Answer:

a) Who read the most books?

b) What is the total number of books read?

c) What is the average number of books read?

Look at this set of numbers:

3, 5, 7, 3, 9, 5, 3, 6

a) What is the mode?

b) What is the range?

c) What is the mean?

TOTAL : 50

SECTION A: Multiple Choice (10 × 2 = 20 marks)

C. 11

C. 15

B. 72

B. $\frac{3}{4}$

C. Pentagon

C. 50

C. $4000 + 200 + 0 + 8$

B. 1,750 ml

D. Obtuse

B. 7

SECTION B: Short Answer (5 × 4 = 20 marks)

Six thousand five hundred and nine

✓ 4 marks

$$243 \times 6 = 1,458$$

✓ 2 marks for working, 2 marks for correct answer

$$2.25\text{km} = 2,250$$

✓ 2 marks for conversion factor, 2 marks for answer

$$12/16 = 3/4$$

✓ 4 marks for simplification

$$\text{Area} = 9 \times 7 = 63\text{cm}$$

✓ 2 marks for formula, 2 marks for answer

SECTION C: Word Problems (5 × 6 = 30 marks)

$$85 \times 12 = \text{R}1,020$$

✓ 2 marks for method, 2 marks for multiplication, 2 marks for answer

$$4.5 \div 3 = 1.5\text{m}$$

✓ 2 marks for division, 2 for steps, 2 for answer

$$\text{Total pens} = 6 + 8 + 10 = 24$$

Black pens = 10

Fraction = $10/24 = 5/12$

✓ 2 marks for total, 2 for fraction, 2 for simplification

$1350 \div 15 = 90$ full boxes

✓ 2 marks for division, 2 for working, 2 for answer

$5 - 2.75 = 2.25$ L left

✓ 2 marks for subtraction, 2 for method, 2 for answer

SECTION D: Geometry and Patterns (4 × 5 = 20 marks)

✓ 2 marks for correct hexagon shape

✓ 3 marks for labeling equal sides and angles

Example:

Cube: 6 faces, 12 edges, 8 vertices

Cone: 2 faces, 1 edge, 1 vertex

✓ 2.5 marks per shape

Pattern: 35, 30, 25, 20, 15, 10

✓ 1 mark per correct number

Sum of triangle angles = 180°

$$40^\circ + 65^\circ = 105^\circ$$

Missing angle =

$$180^\circ - 105^\circ = 75^\circ$$

✓ 2 marks for sum, 3 marks for answer

SECTION E: Data Handling ($2 \times 5 = 10$ marks)

a) Carlos

b)

$$12 + 8 + 15 + 10 = 45$$

$$c) 45/4 = 11.25$$

✓ 1 mark each for a) and b), 3 marks for c)

Numbers: 3, 5, 7, 3, 9, 5, 3, 6

a) Mode = 3 (appears 3 times)

b) Range = $9 - 3 = 6$

c) Mean = $3 + 5 + 7 + 3 + 9 + 5 + 3 + 6 / 8 = 41/8 = 5.125$

✓ 1 mark for each correct answer, 2 for mean working

TOTAL : 50