

GRADE 8 | 2024

Grade 8 Mathematics Practice Exam

Mathematics

CAPS ALIGNED

GRADE 8 MATHEMATICS PRACTICE EXAMINATION

Time: 2 hours

Marks: 100

INSTRUCTIONS:

- Answer ALL questions in the spaces provided.
- Show ALL working for full marks.
- Write neatly and clearly.
- This paper consists of multiple sections.

SECTION 1: NUMBERS AND CALCULATIONS**Question 1.1 (3 marks)**Calculate: $(-12) + 8 - (-5)$

Question 1.2 (4 marks)Simplify: $\frac{3}{4} + \frac{2}{3} - \frac{1}{2}$

Question 1.3 (4 marks)

A shirt costs R250. It is on sale at 20% off. Calculate the sale price.

Question 1.4 (2 marks)

Write 0.000045 in scientific notation.

SECTION 2: ALGEBRA**Question 2.1 (4 marks)**Simplify: $3(2x - 4) - 2(x + 5)$

Question 2.2 (3 marks)

Solve for x: $2x + 7 = 15$

Question 2.3 (3 marks)

Solve for x: $x/4 - 3 = 2$

Question 2.4 (4 marks)

If $p = 2$ and $q = -3$, calculate $3p^2 - 2pq$

SECTION 3: GEOMETRY AND MEASUREMENT**Question 3.1 (6 marks)**

The angles of a triangle are $(2x+10)$, $(3x-5)$, and $(4x+15)$ degrees. Find x and all three angles.

Question 3.2 (5 marks)

Calculate the area and perimeter of a rectangle with length 8.5 cm and width 5.2 cm.

Question 3.3 (4 marks)

In a right-angled triangle, two sides are 5 cm and 12 cm. Find the hypotenuse.

SECTION 4: DATA HANDLING

Question 4.1 (8 marks)

The following data shows test scores: 45, 67, 72, 56, 89, 45, 72, 68, 72, 54
Calculate: a) Mean b) Median c) Mode d) Range

Question 4.2 (3 marks)

A bag contains 4 red, 3 blue, and 5 green marbles. What is the probability of drawing a blue marble?

TOTAL: 53 marks