

MATHEMATICS GRADE 10
END OF TERM 1 EXAMINATION 2026

NAME.....**ADM NO**.....

DATE.....**SIGN**.....

Time: 2 ½ Hours

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in the spaces provided.

1. Simplify:

(a) $3x + 5x - 2x$ (2 marks)

(b) $4(2a - 3) - 2(a + 5)$ (2 marks)

2. Solve the equation:

$3x - 7 = 11$ (4 marks)

3. Factorize completely:

$2x^2 + 7x + 3$ (4 marks)

4. Expand and simplify:

$$(x + 3)(x - 5) \text{ (4 marks)}$$

5. Solve:

$$2x^2 - 8 = 0 \text{ (4 marks)}$$

6. A rectangle has length $(x + 4)$ cm and width $(x - 2)$ cm.
Find its area in terms of x .

(5 marks)

7. Solve the simultaneous equations:

$$2x + y = 7$$

$$x - y = 1$$

(6 marks)

8. Simplify:

$\frac{3}{4} + \frac{5}{6}$ (2 marks)

9. Express 0.375 as a fraction in its simplest form.

(2 marks)

10. Find the next term in the sequence: 5, 9, 13, 17, ...,

(2 marks)

11. Find the value of x if:

$\frac{5x}{2} = 15$ (4 marks)

12. Calculate the mean of: 4, 6, 8, 10, 12

(4 marks)

13. Find the area of a triangle with base 8 cm and height 5 cm.

(4 marks)

14. Convert 72 km/h to m/s.

(4 marks)

15. Find the perimeter of a square of side 7 cm.

(3 marks)

16. Evaluate:

$$2^3 + 5^2 \quad (4 \text{ marks})$$

17. Solve:

$$x/3 + 2 = 5 \quad (4 \text{ marks})$$

18. Find the volume of a cube of side 4 cm.

(4 marks)

19. A bag contains 3 red and 2 blue balls. One ball is picked at random. Find the probability of picking a red ball.

(4 marks)

20. Find the value of:

$$\sqrt{81} + \sqrt{16} \quad (4 \text{ marks})$$

21. Solve for y:

$$3y + 9 = 0 \quad (4 \text{ marks})$$

22. Find the simple interest on Ksh 2000 at 5% per annum for 2 years.

(4 marks)

24. Find the sum of angles in a quadrilateral.

(4 marks)