KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT

GRADE 9 — END OF TERM 2 EXAMINATION 2026

MATHEMATICS

KJSEA 903

TIME: 2 Hours

Candidate's Name		**Adm Number**	
School Name		**School Code**	
Candidate's Signature		**Date**	

INSTRUCTIONS TO CANDIDATES

1. This paper has two sections: A (Multiple Choice, 20 marks) and B (Structured, 80 marks).

2. Answer ALL questions. Show ALL working in section B.

3. Non-programmable calculators may be used except where stated.

SECTION A: (20 Marks)

1. Simplify: $(3x^2y^3)^2 \div (9x^3y)$

A. $x\,y^5$ B. xy^5 C. x^2y^4 D. xy^4

2. The expression $x^2 - 3x - 28$ factorises to

A. $(x-7)(x+4)$ B. $(x+7)(x-4)$ C. $(x-4)(x-7)$ D. $(x+4)(x+7)$

3. Solve for x: $\log_2(x + 1) = 3$

A. $x = 7$ B. $x = 8$ C. $x = 9$ D. $x = 6$

4. Given matrix A = [[2,1],[3,4]], the determinant of A is

A. 5 B. 11 C. −5 D. −11

5. A quantity decreases by 20% then by a further 10%. The overall percentage decrease is

A. 30% B. 28% C. 32% D. 26%

6. In a triangle, the sine rule states that a/sin A = b/sin B = c/sin C. In a triangle where a=8, A=30° and B=45°, find side b.

A. $8\sqrt{2}$ B. $4\sqrt{2}$ C. 16 D. 4

7. The equation of a circle with centre (3,−2) and radius 5 is

A. $(x-3)^2+(y+2)^2=25$ B. $(x+3)^2+(y-2)^2=25$ C. $(x-3)^2+(y-2)^2=25$ D. $(x+3)^2+(y+2)^2=25$

8. The vector AB where A=(2,3) and B=(7,−1) is