



Numerion Academy
STRUCTURED PATHWAY TO HIGHER STUDY SCORES

STUDENT NAME _____
YEAR OF STUDY _____

MATHS (YEAR 10) • PRACTICE ASSIGNMENT

Quadratics and Coordinate Geometry Practice

ALGEBRA **HARD**

Work through each question in order. Show your working in the space provided where it helps — there's no time limit, just do your best.

- 1

Solve the quadratic equation: $x^2 - 7x + 12 = 0$.
- 2

Simplify: $(3x^2y)^3 \div (9x^4y^2)$.
- 3

A 5m ladder leans against a wall, reaching 4m up. Find the distance from the wall's base to the ladder's foot.
- 4

Find the equation of the line passing through (2, 5) and (4, 9).
- 5

A data set has a standard deviation close to zero. What does this tell you about the spread of the data?
- 6

A bag contains 3 red, 4 green and 5 blue balls. One is drawn at random. Find $P(\text{not red})$.

TEACHER'S REMARKS

Score: _____ / 6