



MATHS (YEAR 9) • PRACTICE ASSIGNMENT

Factorising and Pythagoras Practice

ALGEBRA MEDIUM

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

Factorise: $x^2 - 5x - 14$.
- 2

Solve the simultaneous equations: $y = 2x + 1$ and $y = x + 4$.
- 3

A cylinder has radius 3cm and height 10cm. Find its volume (use $\pi \approx 3.14$).
- 4

Use Pythagoras' theorem to find the hypotenuse of a right triangle with legs 6cm and 8cm.
- 5

A set of test scores has mean 72: 65, 70, 75, 80, x. Find x.
- 6

Events A and B are independent, with $P(A) = 0.4$ and $P(B) = 0.5$. Find $P(A \text{ and } B)$.

TEACHER'S REMARKS

Score: _____ / 6