

JEE MAIN STRAIGHT LINES — VARIOUS FORMS OF THE EQUATION OF A LINE — PYQS

Max. Marks: 12
Questions: 3

Section A (MCQ) — 3 questions

- Q.1** Let the angles made with the positive x-axis by two straight lines drawn from the point $P(2, 3)$ and meeting the line $x + y = 6$ at a distance $\sqrt{\frac{2}{3}}$ from the point P be θ_1 and θ_2 . Then the value of $(\theta_1 + \theta_2)$ is: [JEE Main 2026 (Online) 24th January Evening Shift]
- (1) $\frac{\pi}{2}$ (2) $\frac{\pi}{3}$ (3) $\frac{\pi}{12}$ (4) $\frac{\pi}{6}$

Scan or tap for the full solution



- Q.2** Let $A(1, 2)$ and $C(-3, -6)$ be two diagonally opposite vertices of a rhombus, whose sides AD and BC are parallel to the line $7x - y = 14$. If $B(\alpha, \beta)$ and $D(\gamma, \delta)$ are the other two vertices, then $|\alpha + \beta + \gamma + \delta|$ is equal to :

[JEE Main 2026 (Online) 23rd January Evening Shift]

- (1) 3 (2) 6 (3) 1 (4) 9

Scan or tap for the full solution



- Q.3** Let the area of the triangle formed by a straight line $L: x + by + c = 0$ with co-ordinate axes be 48 square units. If the perpendicular drawn from the origin to the line L makes an angle of 45° with the positive x-axis, then the value of $b^2 + c^2$ is :

[JEE Main 2025 (Online) 2nd April Evening Shift]

- (1) 90 (2) 83 (3) 93 (4) 97

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ANSWER KEY

Ques.	1	2	3								
Ans.	1	2	4								