PYQSide PYQSide.com — free PYQs with solutions Powered by PrepBlink

JEE MAIN STRAIGHT LINES — FAMILY OF LINES, CONCURRENCY — PYQS

Max. Marks: 12 **Questions:** 3

Section A (MCQ) — 3 questions

Q.1 If a straight line drawn through the point of intersection of the lines $4x + 3y-1 = 0$ and $3x + 4y-1 = 0$, meets the co-ordinate axes at the points P and Q, then the locus of the mid point of PQ is : [JEE Main 2026 (Online) 8th April Evening Shift]

(1) $x + y-7 = 0$ (2) $x + y-14xy = 0$

(3) $2x + y + 14xy = 0$ (4) $x + 2y-14xy = 0$

Scan or tap for the full solution

Q.2 Among the statements

(S1) : If A(5, − 1) and B(−2, 3) are two vertices of a triangle, whose orthocentre is (0, 0), then its third vertex is (−4, − 7)

and

(S2) : If positive numbers 2a, b, c are three consecutive terms of an A.P., then the lines $ax + by + c = 0$ are concurrent at (2, − 2),

[JEE Main 2026 (Online) 22nd January Evening Shift]

(1) both are incorrect (2) only (S2) is correct

(3) both are correct (4) only (S1) is correct

Scan or tap for the full solution

Q.3 Consider the lines $x(3\lambda + 1) + y(7\lambda + 2) = 17\lambda + 5$, λ being a parameter, all passing through a point P. One of these lines (say L) is farthest from the origin. If the distance of L from the point (3, 6) is d, then the value of d^2 is

[JEE Main 2025 (Online) 3rd April Evening Shift]

(1) 10 (2) 20 (3) 15 (4) 30

Scan or tap for the full solution

ANSWER KEY

Ques.	1	2	3								
Ans.	**2**	**3**	**2**								