

JEE MAIN RELATIONS AND FUNCTIONS — LOGARITHMS AND THEIR PROPERTIES (JEE) — PYQS

Max. Marks: 12
Questions: 3

Section A (MCQ) — 2 questions

- Q.1** The sum of all the real solutions of the equation $\log_{(x+3)}(6x^2 + 28x + 30) = 5 - 2\log_{(6x+10)}(x^2 + 6x + 9)$ is equal to :

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

- (1) 1 (2) 4 (3) 0 (4) 2

Scan or tap for the full solution 

- Q.2** The product of all solutions of the equation $e^{5(\log_e x)^2 + 3} = x^8$, $x > 0$, is :

[JEE Main 2025 (Online) 22nd January Morning Shift]

- (1) e^2 (2) e (3) $e^{6/5}$ (4) $e^{8/5}$

Scan or tap for the full solution 

Section B (Numerical) — 1 question

- Q.3** The sum of squares of all the real solutions of the equation $\log_{(x+1)}(2x^2 + 5x + 3) = 4 - \log_{(2x+3)}(x^2 + 2x + 1)$ is equal to _____.

[JEE Main 2026 (Online) 8th April Evening Shift]

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ANSWER KEY

Section A (MCQ) — 2 questions

Ques.	1	2									
Ans.	3	4									

Section B (Numerical) — 1 question

Ques.	3										
Ans.	2										