

PYQSide

JEE MAIN MOTION IN A STRAIGHT LINE — KINEMATIC EQUATIONS FOR UNIFORMLY ACCELERATED MOTION — PYQS

Max. Marks: 8

Questions: 2

Section A (MCQ)

- Q.1** A paratrooper jumps from an aeroplane and opens a parachute after 2 s of free fall and starts decelerating with 3 m/s^2 . At 10 m height from ground, while descending with the help of parachute, the speed of paratrooper is 5 m/s. The initial height of the airplane is _____ m.
($g = 10 \text{ m/s}^2$)

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

- (1) 92.5 (2) 62.5 (3) 20 (4) 82.5

Scan or tap for the full solution



Section B (Numerical)

- Q.2** Two masses of 3.4 kg and 2.5 kg are accelerated from an initial speed of 5 m/s and 12 m/s, respectively. The distances traversed by the masses in the 5th second are 104 m and 129 m, respectively. The ratio of their momenta after 10 s is $\frac{x}{8}$. The value of x is _____.

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

Scan or tap for the full solution



ANSWER KEY

Section A (MCQ)

Ques.	1										
Ans.	1										

Section B (Numerical)

Ques.	2										
Ans.	9										