

NEET	Class - 11 th	Topic - Projectile_Motion
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1. A projectile is thrown with a speed of 20 m/s at an angle of 30° to the horizontal. What is the maximum height attained?
(a) 5 m (b) 7.5 m
(c) 10 m (d) 15 m
2. A ball is projected with a velocity of 40 m/s at 60° to the horizontal. What is the range of the projectile?
(a) 70 m (b) 120 m
(c) 141 m (d) 160 m
3. A particle is projected horizontally from a height of 45 m. How long does it take to reach the ground? (Take $g = 10 \text{ m/s}^2$)
(a) 2 s (b) 3 s
(c) $\sqrt{4.5}$ s (d) $\sqrt{9}$ s
4. If a projectile takes 4 seconds to reach the maximum height, what is the total time of flight?
(a) 2 s (b) 4 s
(c) 8 s (d) 10 s
5. A stone is projected at an angle of 45° with a velocity of 28 m/s. What is the time of flight of the projectile?
(a) 2.8 s (b) 4.0 s
(c) 5.6 s (d) 6.8 s
6. A body is projected with a velocity of 25 m/s making an angle of 60° with the horizontal. What is the maximum height attained?
(a) 12 m (b) 20 m
(c) 24.9 m (d) 28.6 m

7. The horizontal range of a projectile is 100 m and the time of flight is 5 s. What is the horizontal component of its velocity?
- (a) 10 m/s (b) 15 m/s
(c) 20 m/s (d) 25 m/s
8. Which of the following factors does not affect the time of flight of a projectile?
- (a) Initial speed (b) Acceleration due to gravity
(c) Angle of projection (d) Mass of the projectile
9. The path of a projectile is:
- (a) Circular (b) Elliptical
(c) Parabolic (d) Linear
10. For a given initial velocity, the maximum range of a projectile is obtained when the angle of projection is:
- (a) 30° (b) 45°
(c) 60° (d) 90°