

1. A car moving with an initial speed of 20 m/s is brought to rest after covering a distance of 200 meters. Find the car's acceleration.
2. A ball is thrown vertically upward with an initial speed of 30 m/s . Calculate the maximum height it reaches.
3. A car accelerates from rest at a rate of 2 m/s^2 . How far will it travel in 10 seconds?
4. A cyclist is traveling at a speed of 10 m/s and accelerates at a rate of 1 m/s^2 for 5 seconds. Determine the final speed and the distance traveled.
5. A vehicle decelerates from 25 m/s to a stop in 50 meters. Find the deceleration.
6. A train moving at 15 m/s is brought to rest in 60 meters. What is the train's deceleration?
7. An object is thrown downward with an initial speed of 5 m/s from a height of 50 meters. Determine its speed just before hitting the ground.
8. A sprinter accelerates from rest to 9 m/s over a distance of 45 meters. What is the acceleration?
9. A car traveling at 18 m/s is decelerated to 10 m/s over a distance of 64 meters. Find the deceleration.
10. A stone is thrown upward with an initial speed of

20 m/s. Calculate its speed after 2 seconds of ascent.

11. A car starts from rest and accelerates uniformly at 3 m/s^2 for 8 seconds. Find the distance traveled by the car.

12. A train moving with a constant acceleration covers a distance of 400 meters in 20 seconds. If its initial speed was 10 m/s, what is the acceleration?

13. A ball is thrown vertically upward with an initial velocity of 25 m/s. Find the height reached by the ball after 3 seconds.

14. A car accelerates from rest at 4 m/s^2 for 12 seconds. Calculate the distance traveled.

15. A cyclist starts from rest and accelerates uniformly to a speed of 15 m/s in 6 seconds. Determine the distance covered in this time.

16. A vehicle traveling at 10 m/s accelerates uniformly at 2 m/s^2 for 5 seconds. Find the distance traveled.

17. A rocket accelerates from rest at 5 m/s^2 . Find the distance it covers in 7 seconds.

18. A car decelerates uniformly from 20 m/s to 5 m/s in 6 seconds. Calculate the distance traveled during this

time.

19. A stone is dropped from a height of 45 meters. Calculate the time it takes to hit the ground and the distance covered in the last second.

20. An object starting from rest accelerates uniformly at 3 m/s^2 for 15 seconds. Determine the final velocity and the distance traveled.