

1. How far does a car travel if it accelerates from rest for 5.0 seconds with an acceleration of 8.0 m/s^2 ?

2. An object is dropped from a cliff. How far has it dropped after 10 seconds?

3. A car accelerates at a constant rate of 3.0 m/s^2 from an initial velocity of 20 m/s for 10 seconds.
 - a) How far does it travel?

 - b) How fast will it be going after 15 s?

4. A car accelerates from rest at a rate of 2.0 m/s^2 . How fast will it be going at the end of a 400 m stretch?

5. A ball is thrown straight up with an initial velocity of 20.0 m/s .
 - a) How high does the ball rise?
 - b) How long does it take the ball to get to the top?
 - c) How long does the ball remain in the air?
 - d) What is the velocity of the ball after 1.0 seconds?
 - e) At what time does the ball have a velocity of -10.0 m/s ?
 - f) What is the ball's position when it is -10.0 m/s ?