

Ex #1 You are driving in a car traveling at 18 m/s. You accelerate at a constant rate of 1.3 m/s² until you get up to a speed of 24 m/s. What distance do you cover when you do this?

Ex #2 A train is travelling at 73 m/s. The engineer applies the brakes, which cause the train to decelerate at a rate of 1.8 m/s^2 .

- a.) How much time will it take the train to stop?
- b.) What distance will it take the train to stop?

Ex #3 You drop an object from the top of a building that is 10.6 m tall. How much time will it take the object to hit the ground?

Ex #4 You throw a ball straight up in the air at a velocity of 17 m/s. What is the maximum height the ball will reach?