Physics 11 - Constant Acceleration Worksheet (V2)

1. A ball rolling down an incline travels 6.0 cm in the first 0.25 seconds, and 24 cm in the first 0.50 seconds. Find:
    a)   The average speed for the first quarter second time interval

    b)   The average speed for the second quarter second time interval.

    c)   Find its acceleration.

2. A baseball starts from rest and rolls 50.0 m down a hill in 10.0 seconds.
    (a)   What is the acceleration?

    (b)   What is the velocity after 10.0 seconds?

3. An object has an in initial velocity of 4.0 m/s and a constant acceleration of 2.0m/s^2. How far does it travel in 10.0 seconds?

4. A yard engine shunts a frieght car along a level siding. If the car stops in 50.0 seconds, 250 m from the point where it was released by the engine, calculate the velocity of the car when it was released.