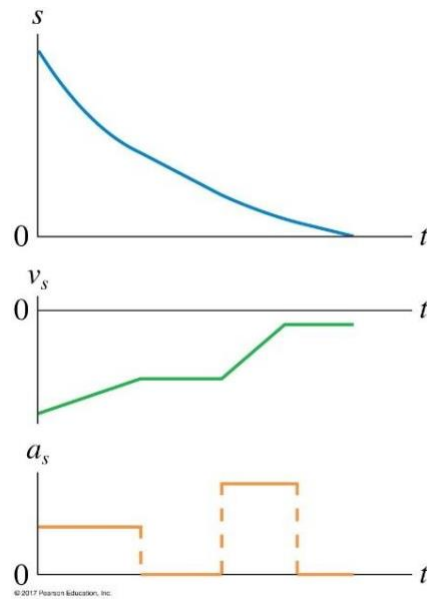


Phys 2320 Spring 2023 Problems related to Workshop 3
Main topic: relationship between velocity and acceleration
and between position and velocity

The figure below shows a set of kinematic graphs for a ball rolling on a track. All segments of the track are straight lines, but some might be tilted. Draw a picture of the track and also indicate the ball's initial condition. (Problem 2.46 from Knight 4th Edition)



The graph below represents the velocity of a bee along a straight line. At $t = 0$, the bee is at the hive. (a) When is the bee farthest from the hive? (b) How far is the bee at its farthest point from the hive? (c) At $t = 13$ s, how far is the bee from the hive? (Problem 2.2 from Crowell). Answer: 8.7 s, 22 m, 20 m.

