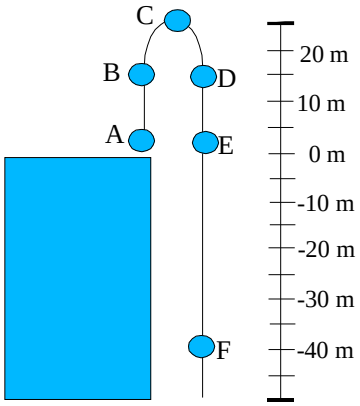


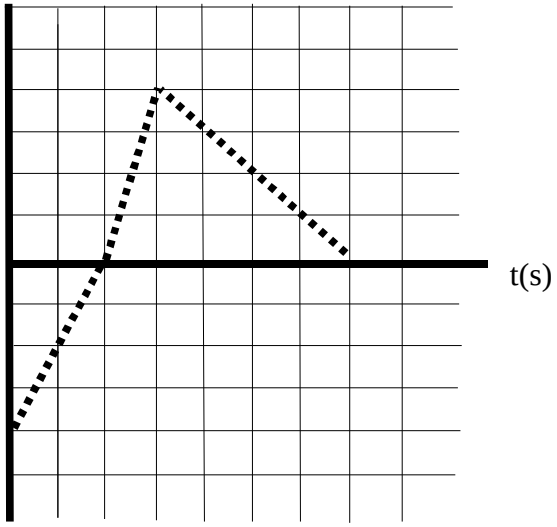
You launch a water balloon along a 1-dimensional trajectory as shown off the edge of a tall building. Neglecting air resistance.....

1. The speed of the balloon at B compared to D is
   A. Higher B. Lower C. The same D. Cannot be determined
2. The speed of the balloon at A compared to E is
   A. Higher B. Lower C. The same D. Cannot be determined
3. The speed of the balloon at F compared to A is
   A. Higher B. Lower C. The same D. Cannot be determined
4. The time required to travel from A-C compared to travel C-E is
   A. Greater B. Less C. The same D. Cannot be determined
5. Graph the position-time and velocity-time and acceleration-time curve
6. Find the initial velocity of the balloon
7. Find the total time the balloon is in the air
8. Find the velocity of the balloon when it hits the ground

Velocity and Position by integration

find the change in position of this traveler

v (m/s)



find the change in velocity of this same traveler

a (m/s^2)