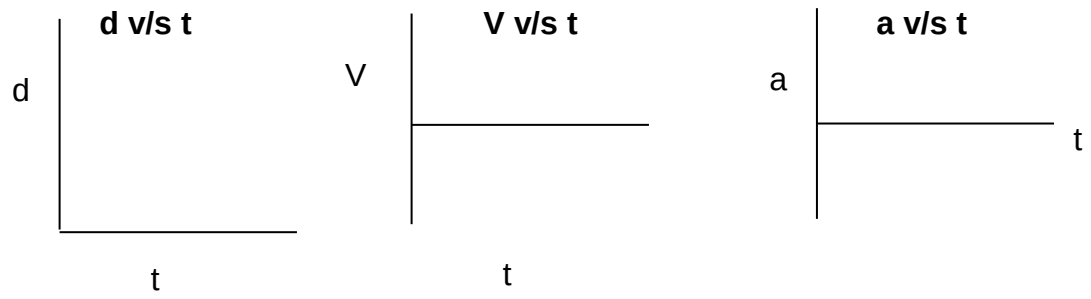
More Kinematics + Freefall problems Part 2

5 A student throws a stone vertically upward with a velocity of 6.0 m/s from a 3rd story window that is 12m above the ground.

a. Draw the d-t, V-t and a-t graphs for the problem above.



b) Find the time that it takes for the stone to reach its highest point?

c) How high is the stone above the ground?

d) How long does it take the stone to reach the ground from its highest point?

e) What is the speed of the stone just before it hits the ground?

c) What is the total time the stone was in the air?