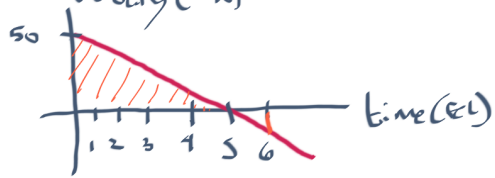


1) If the object is thrown upward at 50 m/s, and it accelerates downward at 10 m/s^2 , then after 5 seconds, it will reach its peak, and after 1 more second, it will have fallen back down a bit.

At its peak, it will be

$$d_{\text{up}} = U_{\text{avg}} \cdot \text{time} \\ = (25 \text{ m/s}) (5 \text{ sec}) = 125 \text{ meters high}$$



And after 1 more second, it will have

fallen

$$d_{\text{down}} = (5 \text{ m/s}) (1 \text{ sec}) = 5 \text{ meters}$$

So at 6 seconds it will be

120 meters from the ground.