

$$\boxed{2/26} \quad a = \frac{1}{2} \frac{d(v^2)}{ds} = \frac{1}{2} \frac{900 - 2500}{400 - 100} = -\frac{8}{3} \frac{\text{ft}}{\text{sec}^2}$$

$$\Delta v = \int a dt ; \quad v - 50 = -\frac{8}{3}t \quad (\text{constant})$$

$$\text{At B: } 30 - 50 = -\frac{8}{3}t, \quad t = 7.50 \text{ sec}$$

$$\Delta s = \int v dt = \int_{5.5}^{7.5} (50 - \frac{8}{3}t) dt = \underline{65.3 \text{ ft}}$$