

01-4-003

$$V_0 = 100 \frac{\text{km}}{\text{h}} = 27.7 \frac{\text{m}}{\text{s}}$$

$$t_d = 0.65 \text{ s}$$

$$\mu_k = 0.8$$

$$\text{also } F = \mu_k mg$$

$$a = \mu g$$

$$v^2 = v_0^2 - 2a \Delta x$$

$$0 = v_0^2 - 2a \Delta x$$

$$\Delta x = \frac{v_0^2}{2a}$$

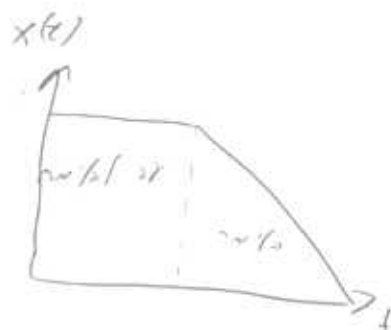
$$S_{\text{min}} = v_0 \cdot t_d + \frac{v_0^2}{2a}$$

$$S_{\text{min}} = v_0 \cdot t_d + \frac{v_0^2}{2g\mu} = 66.9 \text{ m}$$

$$d = 1.5 \cdot v_0 = 41 \text{ m}$$

$$S_{\text{min}} = 41 \cdot 25 = 1025 \text{ m}$$

$$S_{\text{min}} = 175 \text{ m}$$



also given

also given is

also given first part ?

is given