

$$\underline{2/29} \quad v_0 = 100/3.6 = 27.8 \text{ m/s}$$

$$a = -g \sin \theta = -9.81 \sin \left[\tan^{-1} \frac{6}{100} \right] = -0.588 \text{ m/s}^2$$

$$(a) \quad v = v_0 + at = 27.8 - 0.588(10) = \underline{21.9 \text{ m/s}}$$

$$(b) \quad v^2 = v_0^2 + 2a(s-s_0) = 27.8^2 + 2(-0.588)(100)$$

$$v = \underline{25.6 \text{ m/s}}$$