

Exercise 9-16

$$\underline{(a)} \quad v = r\omega = (0.850 \text{ m}) \left(10.0 \frac{\text{rad}}{\text{s}} \right) = 8.50 \text{ m/s}$$

$$\underline{(b)} \quad \omega = \omega_0 + \alpha t$$
$$\therefore \alpha = \frac{\omega - \omega_0}{t} = \frac{(10.0 - 0) \text{ rad/s}}{1.75 \text{ s}} = 5.71 \text{ rad/s}^2$$