

12. Noting that  $\vec{v}_2 = 0$ , then, using Eq. 4-15, the average acceleration is

$$\vec{a}_{\text{avg}} = \frac{\Delta \vec{v}}{\Delta t} = \frac{0 - (6.30\hat{i} - 8.42\hat{j})}{3} = -2.1\hat{i} + 2.8\hat{j}$$

in SI units (m/s<sup>2</sup>).