

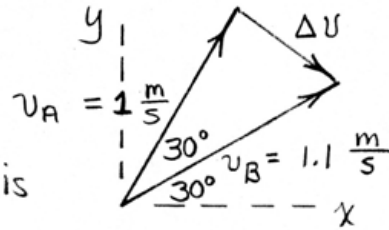
$$2/65 \quad v = \dot{s} = \frac{t}{2}, \quad v_A = \frac{2}{2} = 1 \text{ m/s}, \quad v_B = \frac{2.2}{2} = 1.1 \frac{\text{m}}{\text{s}}$$

$$\Delta v_x = v_{Bx} - v_{Ax} = 1.1 \cos 30^\circ - 1.0 \cos 60^\circ = 0.453 \frac{\text{m}}{\text{s}}$$

$$\Delta v_y = v_{By} - v_{Ay} = 1.1 \sin 30^\circ - 1.0 \sin 60^\circ = -0.316 \frac{\text{m}}{\text{s}}$$

$$\Delta v = \sqrt{0.453^2 + 0.316^2}$$

$$= 0.552 \text{ m/s}$$



The average acceleration is

$$a_{av} = \frac{\Delta v}{\Delta t} = \frac{0.552}{0.20} = 2.76 \text{ m/s}^2$$

$$\begin{aligned} \underline{a}_{av} &= \frac{\Delta \underline{v}}{\Delta t} = \frac{0.453\hat{i} - 0.316\hat{j}}{0.20} \\ &= \underline{2.26\hat{i} - 1.580\hat{j} \text{ m/s}^2} \end{aligned}$$