

$$\underline{2/61} \quad \underline{a_{av}} = \frac{\Delta \underline{v}}{\Delta t} = \frac{(-0.1\hat{i} + 1.8\hat{j}) - (0.1\hat{i} + 2\hat{j})}{0.1}$$

$$= -2\hat{i} - 2\hat{j} \text{ m/s}$$

$$a_{av} = \sqrt{2^2 + 2^2} = \underline{2.83 \text{ m/s}^2}$$

$$\theta = \tan^{-1}\left(\frac{a_y}{a_x}\right) = \tan^{-1}\left(\frac{-2}{-2}\right) = \underline{225^\circ}$$