Agenda

0) Reading assessment

1) Review vectors

a) (x,y) notation to magnitude and angle

b) magnitude and angle to (x,y) notation

2) Displacement and average velocity

3) Motion sensor activity

Homework

Reading: ch. 2.1-2.4 (by next class)

Homework1 (ExpertTA) - Sept. 16

Memory

$$\vec{v} = v_x \hat{i} + v_y \hat{j}$$

$$|\vec{v}| = \sqrt{v_x^2 + v_y^2}$$

$$v_x = |\vec{v}| \cos(\theta)$$

$$v_y = |\vec{v}| \sin(\theta)$$

$$\theta = \tan^{-1}\left(\frac{v_y}{v_x}\right)$$