

HW1-4)

This is a little different from the examples in that we don't know both components or the magnitude and direction, but rather one of each:  $A_y = 12.0$  and  $\theta_A = 127^\circ$ .

$$A_y = A \sin \theta_A \rightarrow A = \frac{A_y}{\sin \theta_A} = \frac{12.0}{\sin(127^\circ)} = \frac{12}{0.800} = 15.0 .$$

$$A_x = A \cos \theta_A = 15 \cos(127^\circ) = 15 \times (-0.6) = -9.0 .$$