



WEEK: \_\_\_\_\_

PROBLEM: \_\_\_\_\_

**GIVEN:**

At the instant shown,  $r = 3$  m and  $\theta = 30^\circ$ . The cartesian components of the velocity of point  $A$  are  $v_x = 2$  m/s and  $v_y = 8$  m/s.

- (a) Determine the velocity of point  $A$  in terms of polar coordinates.
- (b) What is the angular velocity  $d\theta/dt$  of the crane at the instant shown?

**REQUIRED:****SOLUTION:**