

Name: \_\_\_\_\_

1. What is the objective of this lab?
  
2. A vector is given in terms of its x-component  $D_x = -3.4$  m and its y-component  $D_y = +2.1$  m.
  - a) What is this vector in polar form?
  
  - b) Which quadrant is this vector in?
  
3. A vector is given in terms of its magnitude,  $v = 8.7$  m/s and its direction,  $256^\circ$  standard position.
  - a) What is this vector in component form?
  
  - b) Which quadrant is this vector in?

Give the angle shown in the diagram as a:

a) positive standard position angle \_\_\_\_\_

b) negative standard position angle \_\_\_\_\_

c) \_\_\_\_\_  $^\circ$  east of south

d) \_\_\_\_\_  $^\circ$  south of east

