3.2.1. Which of the following parameters, if any, is not a vector?

a) acceleration  
b) displacement  
c) average velocity  
d) all are vectors  
e) none are vectors

3.2.2. Which of the following parameters, if any, is not a scalar quantity?

a) temperature  
b) distance  
c) average speed  
d) instantaneous velocity  
e) all are scalars

3.4.1. Which one of the following statements concerning vectors and scalars is false?

a) In calculations, the vector components of a vector may be used in place of the vector itself.  
b) It is possible to use vector components that are negative.  
c) A scalar component may be either positive or negative.  
d) A vector that is zero may have components other than zero.  
e) Two vectors are equal only if they have the same magnitude and direction.

3.4.3. Vector \( \mathbf{r} \) has a magnitude of 88 km/h and is directed at 25° relative to the x axis. Which of the following choices indicates the horizontal component \( r_x \) of the vector \( \mathbf{r} \)?

a) +22 km/h  
b) +39 km/h  
c) +79 km/h  
d) +66 km/h  
e) +72 km/h

3.4.4. Vector \( \mathbf{A} \) has components \( A_x = 15.0 \) and \( A_y = 9.0 \). What is the approximate magnitude \( A \) of vector \( \mathbf{A} \)?

a) 12.0  
b) 24.0  
c) 10.9  
d) 6.87  
e) 17.5