

Chapter C2: Vector Practice

Physics I

College of the Atlantic

Consider the following two vectors:

$$\vec{A} = -4m\hat{x} + 6m\hat{y} , \quad (1)$$

$$\vec{B} = 10m, \text{ 53 degrees south of east .} \quad (2)$$

1. What is the magnitude and direction of \vec{A} ?
2. What are the components of \vec{B} ?
3. What is $\vec{A} + \vec{B}$? Express your answer both in components and in magnitude/direction form.
4. What is $3\vec{A}$? Express your answer both in components and in magnitude/direction form.
5. What is $\vec{A} - \vec{B}$? Express your answer both in components and in magnitude/direction form.