

Vector Magnitude

Practice Your Understanding

Name: _____

Date: _____

1. Define magnitude. Is it positive or negative? Does it change when the vector points in a different direction? Explain.

2. A vector in one, two and three dimensions has vector components. How can you use a vector's components to calculate the magnitude of the vector? What formula would you use to calculate the magnitude?

3. Let a vector $\vec{C} = 5.5\hat{i} + 8.2\hat{j} + 0\hat{k}$. What is the vector's magnitude?

4. On the graph below draw a vector $\vec{G} = -7\hat{i} - 7\hat{j} + 0\hat{k}$. What is this vector's magnitude? Direction? Angle?

