

Name: _____

ID number: _____

1. Express the following in scientific notation. Pay attention to significant figures.

(a) 435.000

(b) 0.000314

2. The continent of India is moving slowly toward that of Asia at a speed of $5 \frac{\text{centimeters}}{\text{century}}$.

How fast is this in $\frac{\text{meters}}{\text{second}}$?

3. The vector \vec{A} is 1 inch long and points North-West. The vector \vec{B} is 1 inch long and points South-West.

(a) What is the direction of $\vec{A} + \vec{B}$?

(b) What is the direction of $\vec{A} - \vec{B}$?

(c) What is the magnitude of $\vec{A} - \vec{B}$?