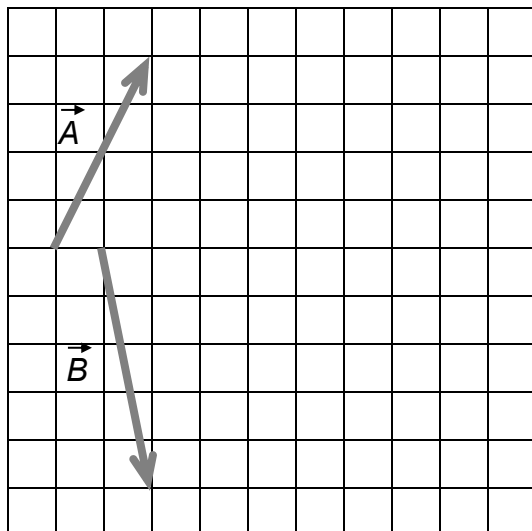


Name: _____

LAB 3 PRE-LAB

1. Two vectors, \vec{A} and \vec{B} , are illustrated on the grid below. On the same grid, draw their sum $\vec{A} + \vec{B}$.



2. Express the vectors \vec{A} , \vec{B} , and $\vec{A} + \vec{B}$ above as their Cartesian (x, y) components.

$$\vec{A} = (\quad , \quad)$$

$$\vec{B} = (\quad , \quad)$$

$$\vec{A} + \vec{B} = (\quad , \quad)$$

3. Express vector $\vec{A} + \vec{B}$ above as magnitude and direction, with magnitude expressed in grid units and direction expressed as degrees counterclockwise of the $+x$ axis. You are encouraged to show your work below.

Magnitude = _____ Direction = _____