1. Read your lab description carefully all the way through.

2. In lab, you will be measuring magnitudes and directions of various vectors. What physical quantity do the vectors in your experiment represent?

3. You are given two vectors \( \mathbf{A} = 4.2\mathbf{i} + 7.5\mathbf{j} \) and \( \mathbf{B} = -3.1\mathbf{i} + 2.0\mathbf{j} \). Sketch these two vectors (approximately to scale). Find the x and y components of a third vector \( \mathbf{C} \) such that the vector sum \( \mathbf{A} + \mathbf{B} + \mathbf{C} = \mathbf{0} \). Sketch vector \( \mathbf{C} \), and verify that the graphical method of summing the three vectors also gives zero.