

QUESTIONS TO HAND IN-EXPERIMENT 5

NAME _____

LAB INSTRUCTOR _____ LAB DAY/TIME _____

1. A force of 5 newtons is applied at an angle of 30° . Find the x- and the y-components of this force.
2. Two forces **A** and **B** have magnitudes of 5 N and 10 N, respectively. What is the magnitude and direction of their sum when they both lie along the same direction?
3. Using the same two vectors as in problem 2 above, what is the magnitude and direction of their sum when **A** is oriented at 0° and **B** is oriented at 180° ?
4. Using the same two vectors as in problem 2 above, what is the magnitude and direction of their sum if **A** is oriented at 0° and **B** is oriented at 90° ?
5. What is the difference between **A** and **B** (the vector $\mathbf{A} - \mathbf{B}$) when they are both oriented in the same direction?