**QUESTIONS TO HAND IN – EXPERIMENT 5**

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**LAB INSTRUCTOR\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_LAB DAY/TIME\_\_\_\_\_\_\_\_\_\_ \_ \_\_**

**1.** A force of 5 newtons is applied at an angle of 30°. Find the *x*- and *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 *A* – *B*), when they are both oriented in the same direction?