

PHYS 221
Experiment 2 — Vector Addition
Prelab

1. What is the objective of this experiment? (1pt.)

2. What is a vector? (2 pt.)

3. How does the force table apparatus work? (2 pt.)

4. What is the *equilibrant* ? (1 pt.)

5. Add the given vectors by the *component method* , by completing the table below. **Show all work** (i.e., all calculations). What is the angle of the resultant vector with respect to the x -axis? Use the back of this sheet if necessary. (4 pts.)

A = 6.0 N at 135° , **B** = 3.0 N at 225° , **C** = 8.7 N at 350°