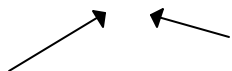


## Physics 1101 Experiment 2 Homework

NAME \_\_\_\_\_

1. For the two vectors shown, show how to add them graphically using (i) the parallelogram method and (ii) the polygon method.



2. A resultant vector is 5 units long and makes an angle of 23 degrees measured counter-clockwise with respect to the positive x-axis. What are the magnitude and angle (measured counter-clockwise with respect to the positive x-axis) of the equilibrant vector?

3. Find the x- and y-components of the vector whose magnitude is 8.73 units making an angle of 155 degrees measured counter-clockwise with respect to the positive x-axis.

4. Specify the sign (positive or negative) of the x- and y-components of a vector in each of the four quadrants (1, 2, 3, and 4) by completing the table.

	x-component	y-component
Quadrant 1 (0-90 degrees)		
Quadrant 2 (90-180 degrees)		
Quadrant 3 (180-270 degrees)		
Quadrant 4 (270-360 degrees)		

NOTE: You should answer questions 1, 2, and 3 in Experiment 2 in the laboratory manual before you come to the laboratory.