

name _____

ID# _____

Experiment 2

Vectors

$F_1 =$ _____

$\theta_1 =$ _____

$F_2 =$ _____

$\theta_2 =$ _____

Experimental Results

$|E| =$ _____

$\theta_E =$ _____

Graphical Results

length of R = _____

$|R| =$ _____

$\theta_R =$ _____

$|E| =$ _____

$\theta_E =$ _____

Analytical Results

$|R| =$ _____

$\theta_R =$ _____

$|E| =$ _____

$\theta_E =$ _____

Show equations and sample calculations:

(4 points)

Four Pulleys Data

	Weight	Angle	F_x	F_y
F_1				
F_2				
F_3				
F_4				
		Totals		

$$\theta = \underline{\hspace{2cm}}$$

$$R = \underline{\hspace{2cm}}$$

Show equations and sample calculations:

(4 points)

3. List at least two professions that you think would require understanding how to do vector addition. **(2 points)**

4. Pick one of the professions you listed for the last question. What vector quantities would that person need to add? What would be the consequences of a mistake? Be very specific in your answers. **(4 points)**