

# Forces in Equilibrium Lab Report

## *Physics*

This is an individual assignment. Make sure to clearly document your work. Please submit your work through Google Classroom (you may hand-write or draw equations and diagrams but please type and written words).

Imagine you had a force table with the following masses set up: 150g at an angle of  $0^\circ$  looking down; 220g at an angle of  $50^\circ$  looking down; and 120g at an angle of  $280^\circ$  looking down AND at an angle of about  $75^\circ$  with respect to the ground.

1. Find the mass and angle necessary to create an equilibrant force. Show all of your calculations clearly and neatly.
2. Using one of the force tables in the back of the room, test your prediction and show your instructor. If your prediction was correct, indicate this in your report. If your prediction was incorrect, find and document any errors in your calculations.