Learning Objectives

Module 1: The student will:

1. Calculate the magnitude and direction of the gravitational force that exists between two masses separated in space with 80% success.
2. In small group setting, determine the relationship that exists between the electrostatic force and two charged objects as the magnitude of charge changes.
3. In a small group setting, determine the relationship that exists between the electrostatic force and separation distance between two charged objects separated by various distances using graphical analysis or mathematical methods.
4. Calculate the magnitude and direction of the electrostatic force that exists between to point charges with mass isolated in space with 80% success.
5. Create a diagram comparing the magnitude and direction of the gravitational force and electrostatic force that exists between charged objects that have known mass and are separated by various distances.