Name: _____ Date: _____ Class: _____

Pre-Activity Quiz Answer Key

Complete the following problems. Show your work.

1. Calculate the slope of a line with points (4, -1) and (2, 3).

   Answer:

   $$m = \frac{y_1 - y_2}{x_1 - x_2} = \frac{-1-3}{4-2} = \frac{-4}{2} = -2$$

2. Determine the equation of this line using the points above.

   Answer:

   $$y = mx + b$$
   $$3 = (-2)(2) + b$$
   $$3 = -4 + b$$
   $$b = 7$$
   $$y = -2x + 7$$

3. What do you know about force? What is a force?

   Example answer: A force is a push or pull on an object due to its interaction with another.