Name: _____   Date: _____

Practice: Investigate Slope and *y*-Intercept Using Technology

1. Identify the slope of each linear relation.
   a) $y = 10x - 1$ b) $y = 12 - 3x$
   c) $y = 2 + \dfrac{5}{6}x$ d) $y = -4x$

2. Identify the *y*-intercept of each linear relation.
   a) $y = 0.5x + 1.2$ b) $y = -3x$
   c) $y = 1 - \dfrac{1}{4}x$ d) $y = x - 0.75$

3. For each linear relation:
   - Graph the equation using a graphing calculator with the standard window settings
   - Sketch the graph in your notebook
   - Calculate the rate of change by looking at the TABLE
   - Determine the value of *y* when $x = 0$
     a) $y = 3x + 8$ b) $y = -x - 2$
     c) $y = 2 - \dfrac{1}{2}x$ d) $y = 7x$

4. Write the equation for each line given the slope and *y*-intercept.
   a) slope: 5, *y*-intercept: 6
   b) slope: 0.6, *y*-intercept: 2
   c) slope: $\dfrac{3}{5}$, *y*-intercept: –3
   d) slope: –8, *y*-intercept: 0

5. For each linear relation in question 4:
   - Graph the equation using a graphing calculator with the standard window settings
   - Sketch the graph in your notebook
   - Record the table of values for *x*-values from 0 to 6

6. Write the equation for each line by first determining the slope and *y*-intercept.

a)

b)

c)