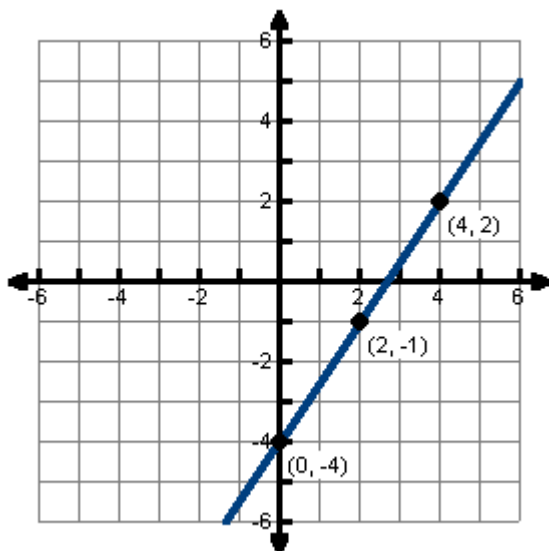**MATH 102 – Guided Reading Questions for Section 2.4**

1. The slope of a line can be though of as the _____ of the line.

2. We measure slope of a line as a ratio of _____ to _____. Slope is usually denoted by the letter _____.

3. Count $\dfrac{rise}{run}$ to find the slope of the graph shown. $\dfrac{rise}{run}$ = m = _____

4. If we know the coordinates of two points on a line, (x_1, y_1) and (x_2, y_2), we may compute the slope using the equation m = _____.

5. Find the slope of the line containing the points (3, 2) and (5, -1) using the slope formula from problem 4. Show all work.

6. Look at the "Discover the Concept" box on page 153. Follow the directions: enter $Y1 = x$, Y2= 3x and Y3 = 0.5x in the Y= screen on your calculator. Use a standard window.

    a. Which line has the greater slope: Y1, Y2 or Y3?   _____

b. How would you change the equations so that the graphs slant downward instead of upward, left to right? (This is question (b) in the "Discover the Concept" box.)
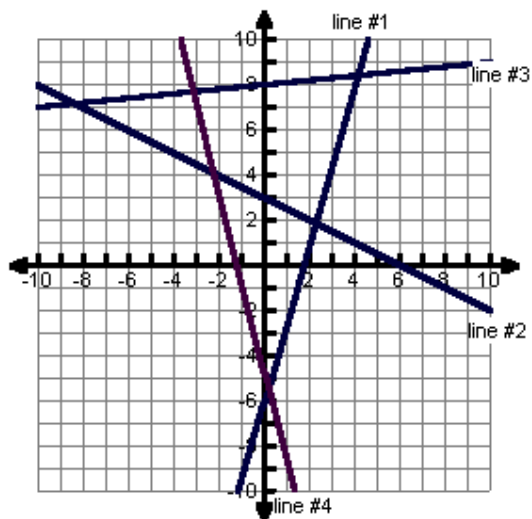
c. Identify the slope as being positive or negative for each line shown below.
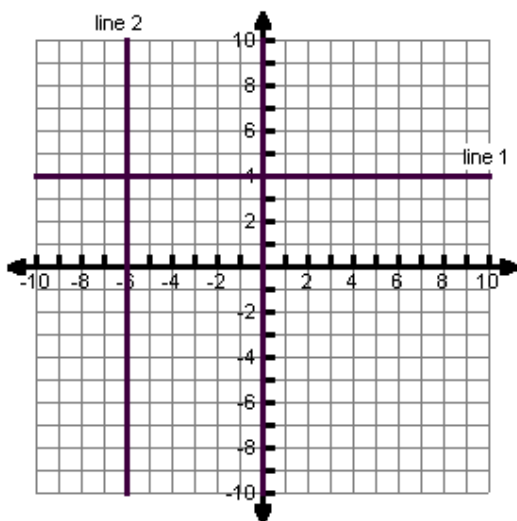
line #1 _____

line #2 _____

line #3 _____

line #4 _____

7. Choose any two points on the line labeled line 1 and compute the slope using the slope formula, $\dfrac{y_2 - y_1}{x_2 - x_1}$. What can you conclude about the slope of **any** horizontal line?

Now choose any two points on the line labeled line 2 and compute the slope using the slope formula. What can you conclude about the slope of **any** vertical line?