Name: _____ Period: _____

Read the Graph

Part I: Before we start.

1. What is the the equation for a straight line (slope-intercept form)?

2. What do you call the point where a straight line crosses the vertical axis?

3. What is the slope of a line whose equation is $y(x) = 4.7x + 2$?

4. In the space below, sketch a graph of $y(x) = 3x + 1$

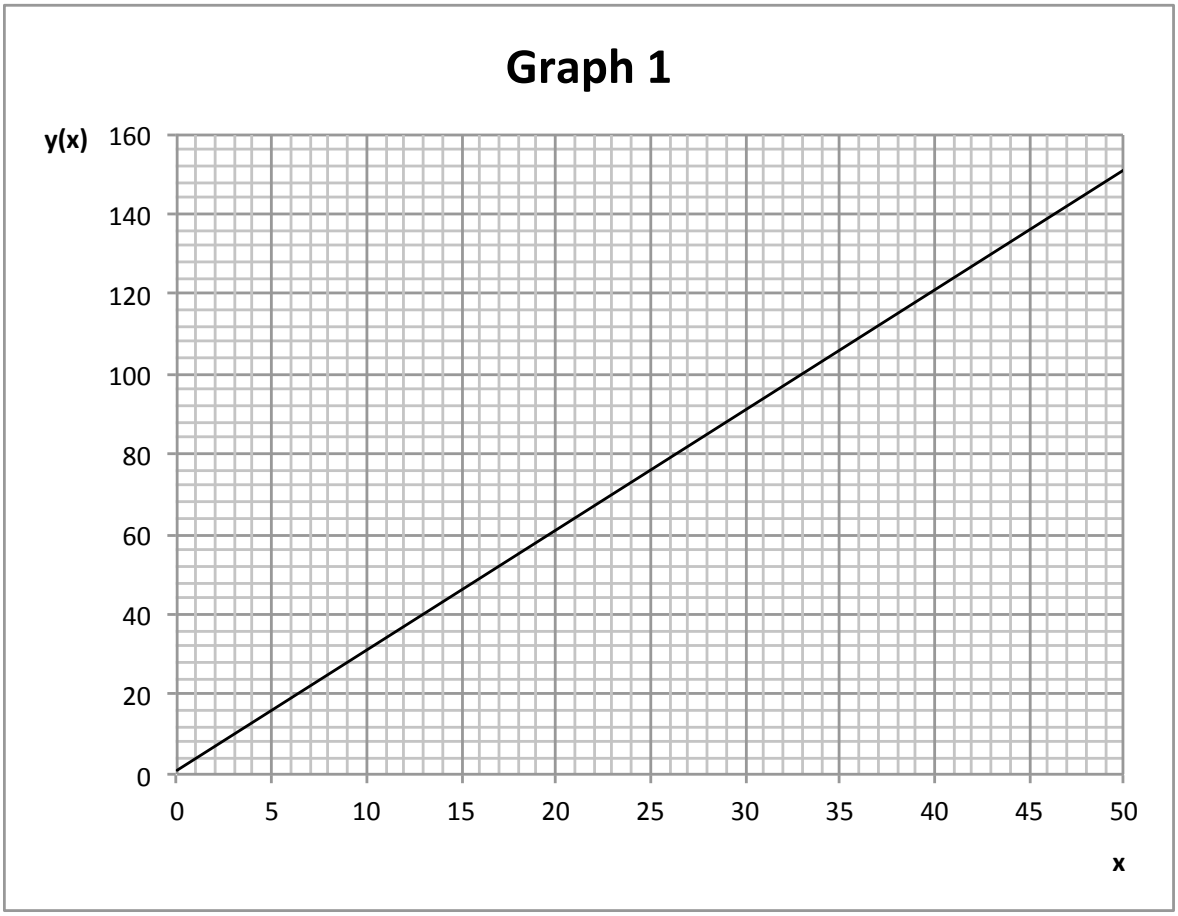
5. How do you calculate the slope of a straight line on a graph?

6. A line passes through the following coordinate pairs: (5,0); (3, 8); (1,16) ;(8,-12); and (9, -16).
A) Which pair of points would be best used to find the slope of the line? Justify your choice.

B) Find the slope and the equation of this line.

Part II: Reading graphs for fun and profit.

1. Use the following graph to fill in the blanks in the table below. Draw lines on the graph to show how you got your answers.

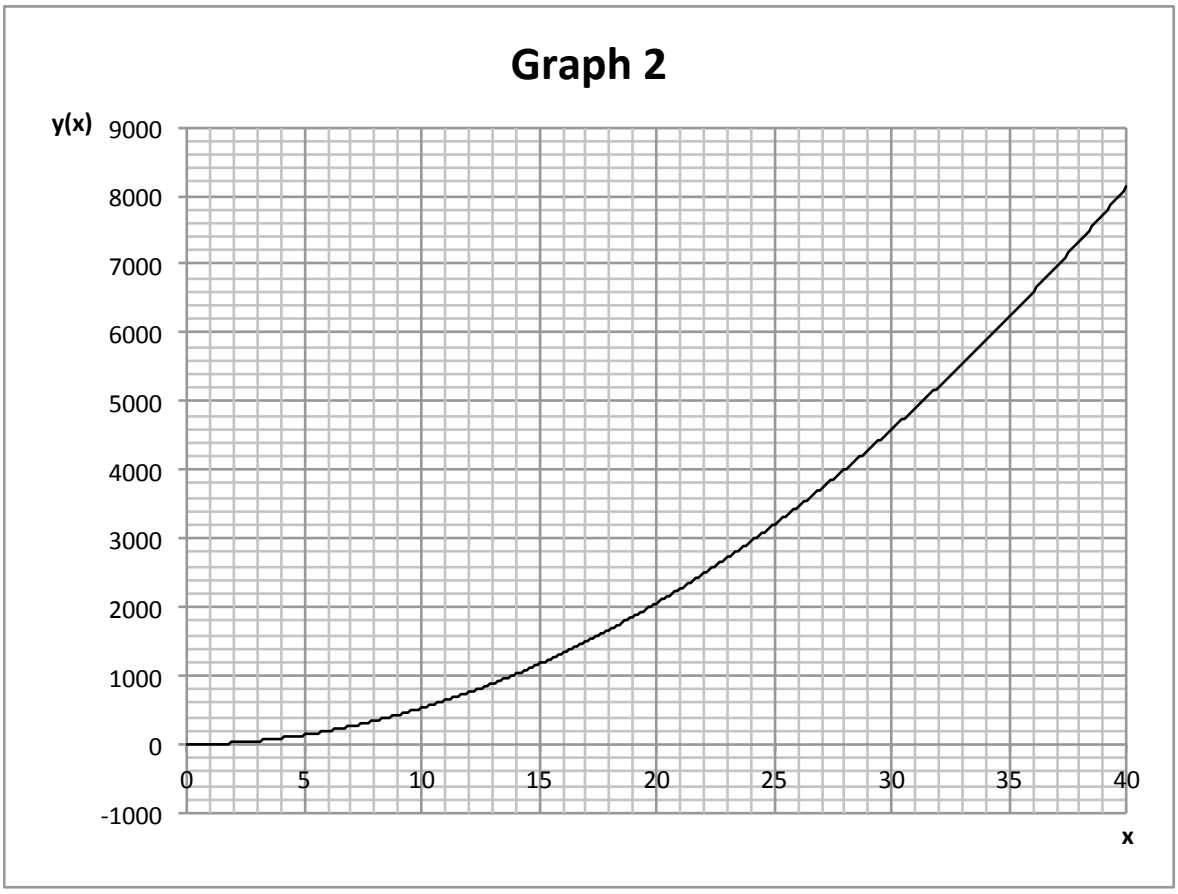


A) x = 6; y = _____ B) x = _____; y = 40 C) x = 15; y = _____ D) x = _____; y = 47

E) x = 22.5; y = _____ F) x = _____; y = 33 G) x = 41; y = _____ H) x = _____; y = 7.5

I) Calculate the slope and then write the equation of this line.

2. Use the following graph to fill in the blanks in the table below. Draw lines on the graph to show how you got your answers.



A) x = 10; y = _____ B) x = _____; y = 400 C) x = 32; y = _____

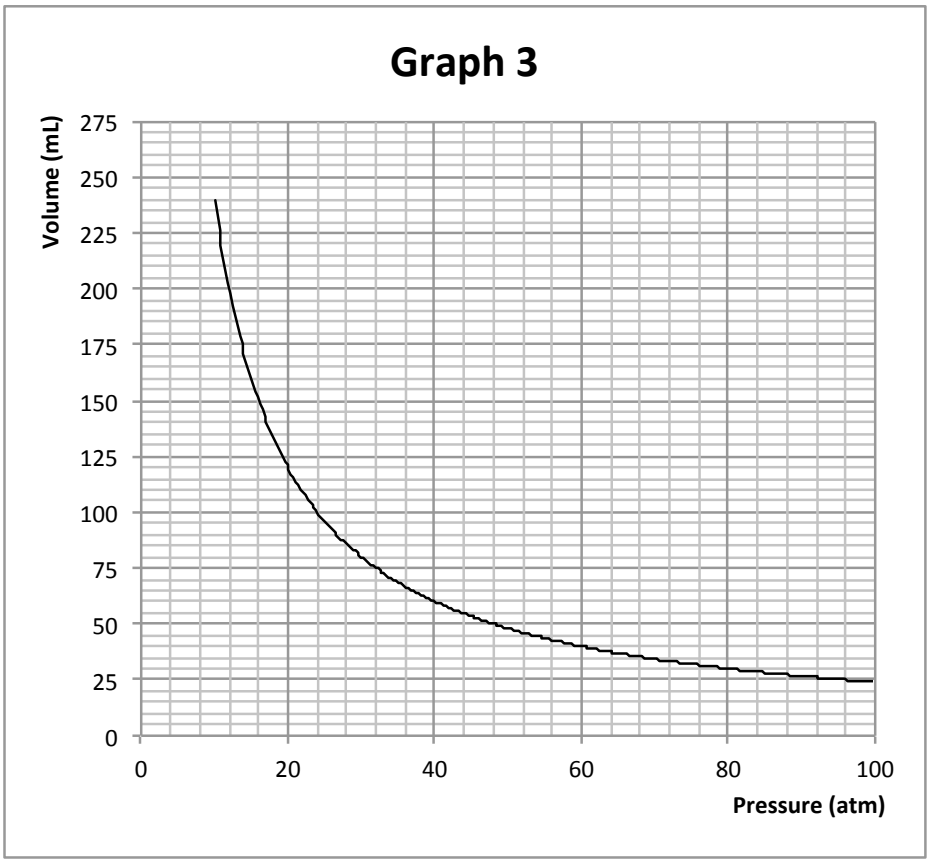
D) x = _____; y = 1300 E) x = 22.5; y = _____ F) x = _____; y = 425

G) x = 37; y = _____ H) x = _____; y = 643

I) Why can you *not* find a single accurate slope for this line?

J) Mega Bonus: Determine an equation that represents this function.

3. Use the following graph to fill in the blanks in the table below. Draw lines on the graph to show how you got your answers.



A) x = 20; y = _____ B) x = _____; y = 50 C) x = 44; y = _____ D) x = _____; y = 90

E) x = 72; y = _____ F) x = _____; y = 202 G) x = 84; y = _____ H) x = _____; y = 260

I) Why can you *not* find a single accurate slope for this line?

J) Mega Bonus: Determine an equation that represents this function.