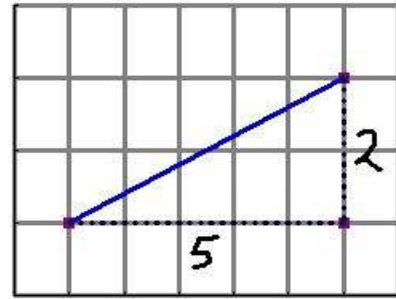


The slope of a line segment is a numerical measure of its "steepness".
 The slope number indicates how quickly the y values are increasing or decreasing.

$$\text{Slope} = \frac{\text{vertical change}}{\text{horizontal change}} = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\text{Slope} = \frac{2}{5}$$

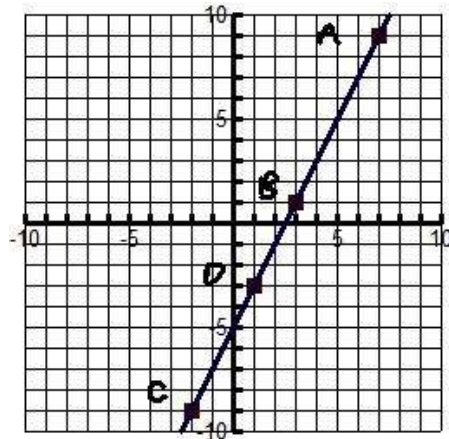
The slope value of this segment is a positive number.
 The y values increase from left to right.



- 1(a) Use the x and y coordinates of points A and B to complete the table and compute the slope of segment AB. Show your work!

	x	y
A		
B		

$$\text{Slope} = \frac{y_2 - y_1}{x_2 - x_1} =$$



- (b) Use the x and y coordinates of points C and D to complete the table and compute the slope of segment CD. Show your work!

	x	y
C		
D		

$$\text{Slope} = \frac{y_2 - y_1}{x_2 - x_1} =$$

- (c) Use the x and y coordinates of points C and B to complete the table and compute the slope of segment CB. Show your work!

	x	y
C		
B		

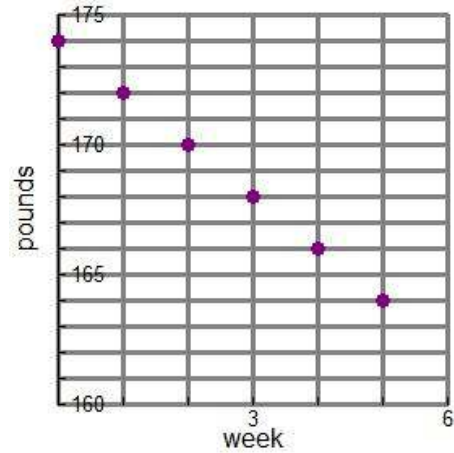
$$\text{Slope} = \frac{y_2 - y_1}{x_2 - x_1} =$$

(d) How are the three slope values related? _____

(e) Can you predict the slope of segment DA? _____

2. An adult on a diet loses 2 pounds each week. The table displays the resulting weights for the first 5 weeks. The graph displays the table data.

week x	weight y
0	174
1	172
2	170
3	168
4	166
5	164



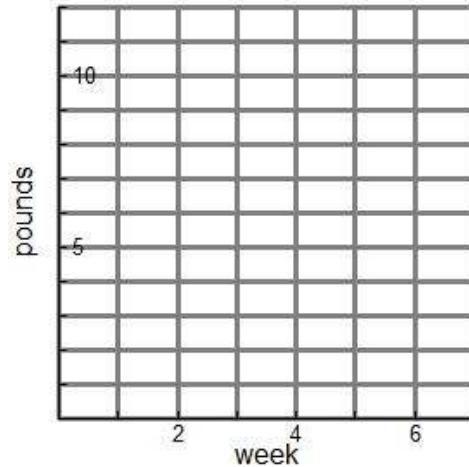
- (a) Draw the line connecting the data points. Compute the slope of the line you have drawn. Show your work! _____
- (b) Circle the correct responses:
The slope is _____ positive/negative ; the y values are _____ increasing/decreasing.
- (c) What does the slope value tell you about the adult's weight change?

3. A newborn baby weighs 7 pounds at birth and gains approximately $\frac{1}{2}$ pound each week.

- (a) Complete the table for the baby's first 6 weeks.

week x	weight y
0	
1	
2	
3	
4	
5	
6	

- (b) Graph the ordered pairs on the grid.
(c) Draw the line segment connecting the points.



- (d) Compute the slope of the segment. Show your work! _____
- (e) Circle the correct responses:
The slope is _____ positive/negative ; the y values are _____ increasing/decreasing.
- (f) What does the slope value tell you about the baby's growth?
