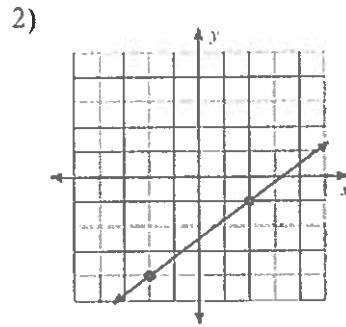
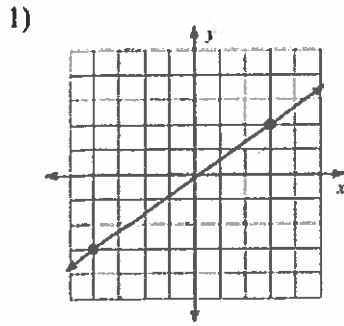


Slope 1

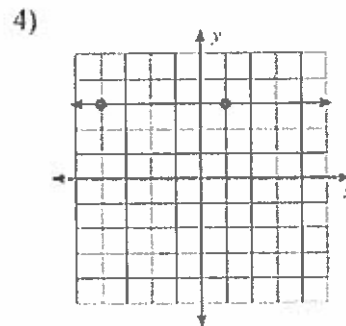
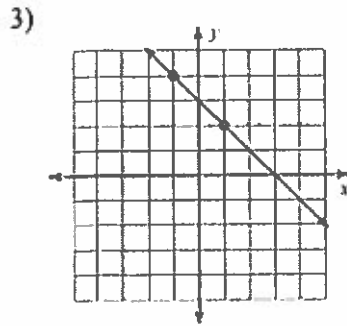
Find the slope of each line. Draw a slope triangle from one point to the next, count the rise and run, and label the triangle.



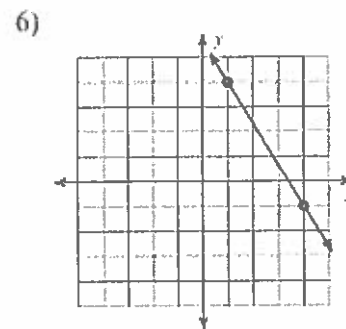
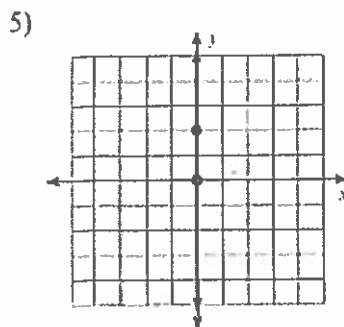
find the slope



15) (1, 5) (7, 3)



16) (6, 2) (-9, 2)



17) (4, 1) (-6, -4)

what's the slope

7) $y = \frac{2}{5}x + 1$

8) $y = x + 1$

9) $y = 1$

10) $y = -\frac{5}{3}x + 3$

11) $y = \frac{8}{5}x + 3$

12) $y = \frac{3}{5}x + 5$

13) $y = -\frac{1}{4}x - 1$

14) $y = 4x$

1. This table represents the number of tiles in a particular tile pattern.

a. How many tiles are in figure 4?

b. How does the number of tiles grow?

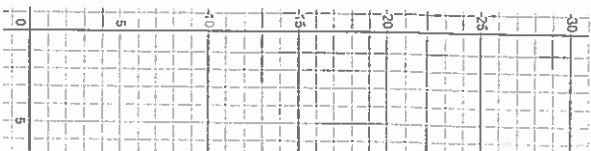
c. How many tiles are in figure 0?

d. Plot and connect the points with a straight edge.

e. What form does the graph make?

This means that growth by addition is linear.

Figure #	# of Tiles
x	y
0	6
1	13
2	20
3	27
4	



2. This graph represents the number of tiles in a particular tile pattern.

a. Fill in the table.

b. How does the number of tiles grow?

c. How many tiles are in figure 0?

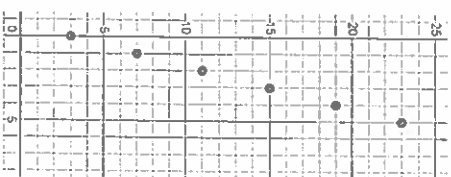
The equation to generate this pattern is

$$y = 4x + 3.$$

d. Describe the 4 in terms of tiles.

e. Describe the 3 in terms of tiles.

Figure #	# of Tiles
x	y
0	
1	
2	
3	
4	
5	
6	



3. Examine these tables of tile patterns.

x	y
0	6
1	19
2	32
3	45

Pattern A

x	y
0	11
1	28
2	45
3	62

Pattern B

x	y
0	1
1	19
2	37
3	55

Pattern C

x	y
0	7
1	22
2	37
3	52

Pattern D

a. Which pattern grows fastest? Explain.

b. Which pattern has the most tiles when it begins? Explain.

c. The equation for Pattern A is $y = 13x + 6$. Describe the 13 and 6 in terms of tiles.

d. The equation for Pattern D is $y = 15x + 7$. Describe the 15 and 7 in terms of tiles.

e. Write the equation for Pattern B.

4. A tile pattern has 14 tiles in figure 0. Three tiles are added each figure number.

a. Fill out the table and plot the points that show the numeric and linear pattern of the tiles.

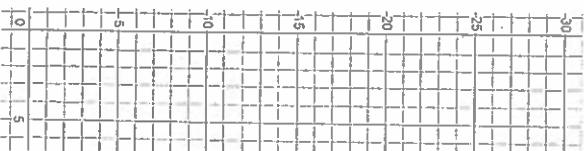
b. The equation of this tile pattern is $y = 3x + 14$. Describe the 3 and 14 in terms of tiles.

Figure #	# of Tiles
x	y
0	
1	
2	
3	
4	
5	
6	

5. Complete the tables and write equations for each. Check that your equations are correct by substituting in one of the given points.

x	0	1	2	3	4	5
y		9	16		30	

a. Equation: _____ Check: _____



x	0	1	2	3	4	5
y			12	17	22	

b. Equation: _____ Check: _____

x	0	1	2	3	4	5
y		12		30		48

c. Equation: _____ Check: _____