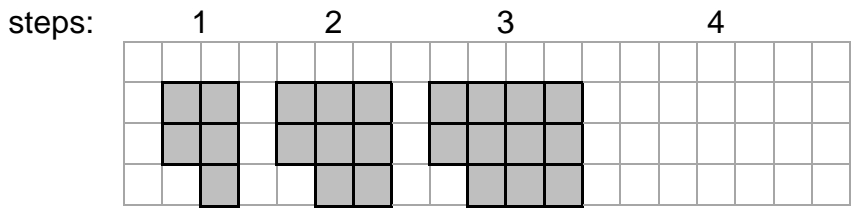


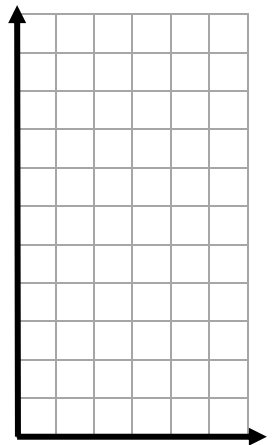
QUIZ 8-4B

1. Below is a square pattern.



- a. Draw the 4th step for the pattern.
- b. Complete the table and graph for the square pattern. Make sure to include labels.

| step # (<i>x</i>) | # of squares (<i>y</i>) |
|---------------------|---------------------------|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |



- c. Write an equation to represent the pattern.
- d. Find the step number when there are 89 squares.
- e. What value represents the rate of change for this pattern?
- f. Interpret the rate of change...

In the picture:

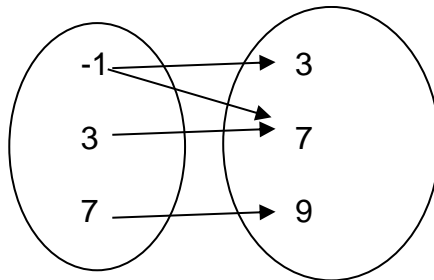
In the table:

In the graph:

QUIZ 8-4B
Continued

2. Circle all of the three representations below that could represent a function.

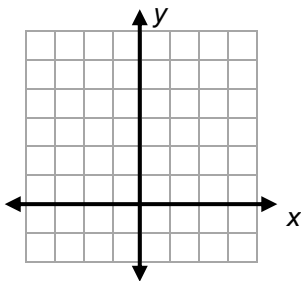
| x | y |
|-----|-----|
| 4 | 12 |
| 9 | 9 |
| 1 | 12 |
| 5 | 15 |
| 6 | 20 |



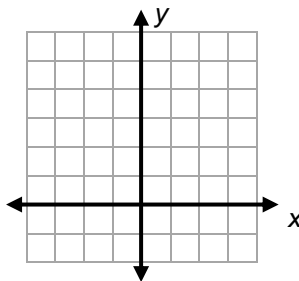
(1, 1), (2, 2), (3, 3), (4, 4)

3. Draw the three graphs as described.

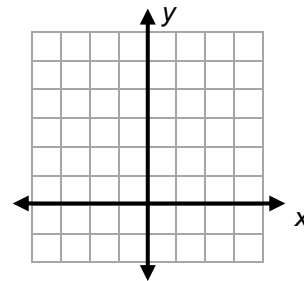
a. A decreasing linear function



b. An increasing linear function



c. A nonlinear non-function



4. Alexandria started a savings plan with \$10 in the bank and is saving \$30 each week. Isabella started a savings plan at the same time and kept track on this graph.

a. Graph Alexandria's savings on this graph.

b. Who is saving at a greater rate? Explain.

