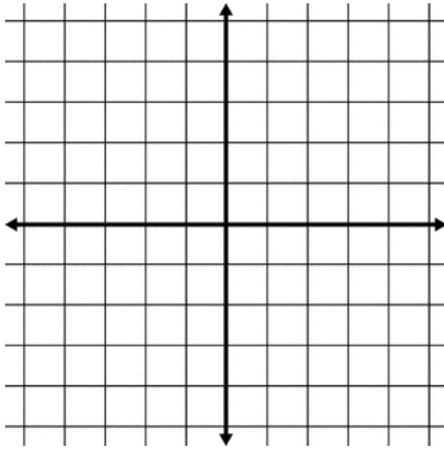


Grade 8 Mathematics Assessment Analysis – SOL Alignment and Cognitive Demand

STANDARD 8.14

The student will make connections between any two representations (tables, graphs, words, and rules) of a given relationship.

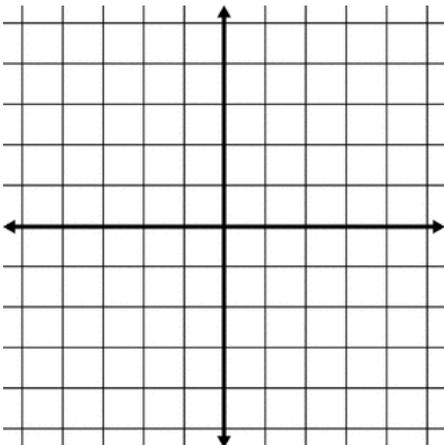
1. Plot the point $(-2, 4)$ and label it as point A. Plot the point $(4, -2)$ and label it as point B.



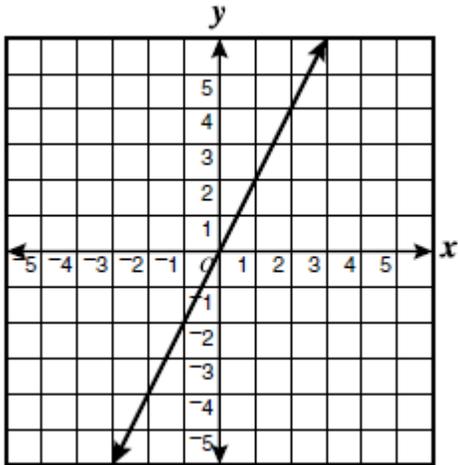
2. Complete the table for $y = 2x - 7$.

x	-2	-1	0	1	2
y					

3. Graph a line with an x-intercept of -2 and a y-intercept of 3 .



4. Select all representations which match the relation shown in the graph.



a.	$y = 2x$														
b.	<table border="1"> <tr> <td>x</td> <td>-2</td> <td>0</td> <td>2</td> <td>4</td> </tr> <tr> <td>y</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> </table>					x	-2	0	2	4	y	-1	0	1	2
x	-2	0	2	4											
y	-1	0	1	2											
c.	$y = \frac{1}{2}x$														
d.	$\{(-1, -2), (0,0), (1, 2), (2, 4)\}$														

5. Write this phrase as an equation:

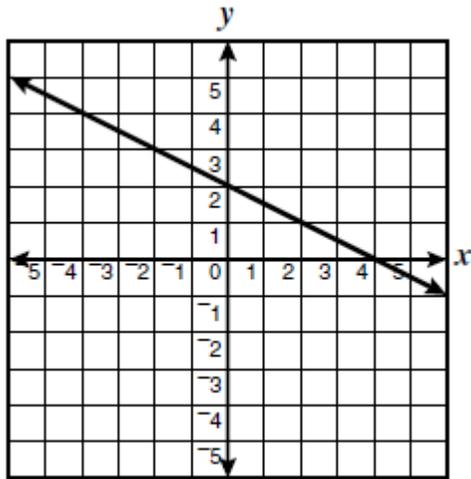
The output (y) is three greater than the input (x).

6. Which situation could be represented by the following table?

Day	0	1	2
Dollars	3	5	7

a.	Jim has \$2 in a piggy bank then adds \$3 each day.
b.	Lois had \$3 in a piggy bank and then added \$2 each day.
c.	Ramon adds \$15 to a piggy bank each day.
d.	Sally spends \$2 from a piggy bank each day.

7. Complete a table of values for the following function.



x					
y					

8. Given the function, $y = \frac{1}{3}x + 1$, complete the table and graph the function.

x					
y					

