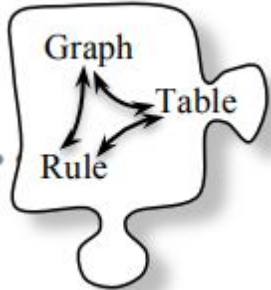
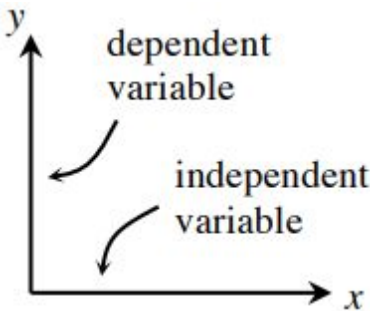
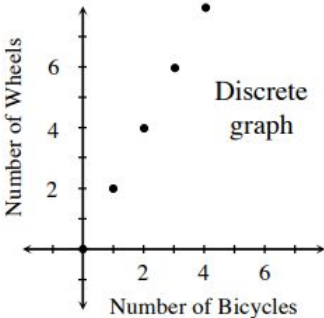
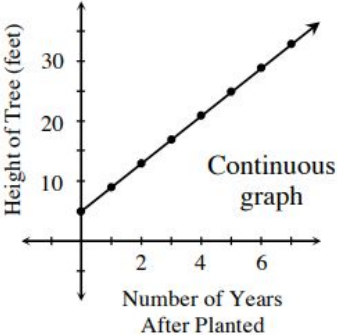


3.1.1-3.1.7 **NOTES:** Graphs, Tables, and Rules

TABLES, GRAPHS & RULES	<p>There are 4 ways we have been interpreting data:</p> <p>1) _____</p> <p>2) _____</p> <p>3) _____</p> <p>4) _____</p> <div style="text-align: right;">  </div>
FUNCTIONS & INPUT/OUTPUT	<p>A function is a _____ that takes _____ values and produces exactly one _____ value.</p>
Independent vs. Dependent Variables	<p>When one quantity (such as tree height) _____ on another (such as years), it is called a _____</p> <p>VARIABLE. That means its value is determined by the value of another variable.</p> <div style="text-align: right;">  </div> <p>If a quantity, such as time, does not depend on another variable, it is referred to as the _____ VARIABLE, which is graphed on the x-axis.</p>
Types of Graphs	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Discrete graph</p> </div> <div style="text-align: center;">  <p>Continuous graph</p> </div> </div>

Example 1

Complete the table by determining the relationship between the input (x) and output (y) values, then write the rule for the relationship.

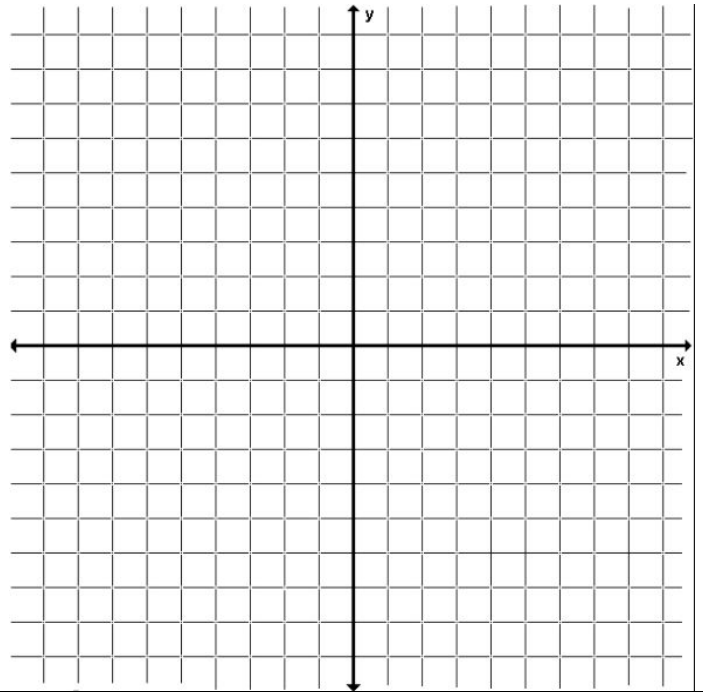
input (x)	2	-1	4	-3	0	-2	1	x
output (y)	3	-3	7	-7	-1	-5	1	

Example 2

Complete the table by determining the relationship between the input (x) values and output (y) values, write the rule for the relationship, then graph the data.

input (x)	4	-3		5	0		3	-2	x
output (y)	8		4	10	0	-2		-4	

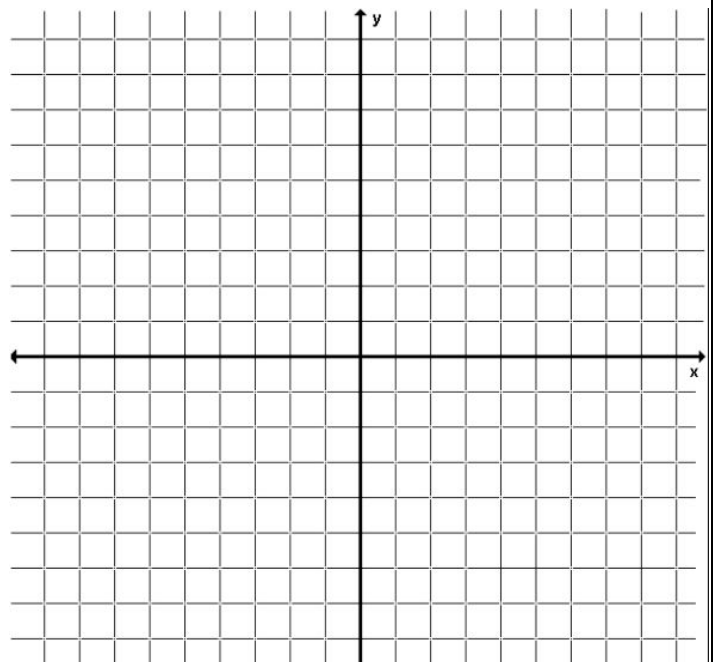
Rule:



Example 3

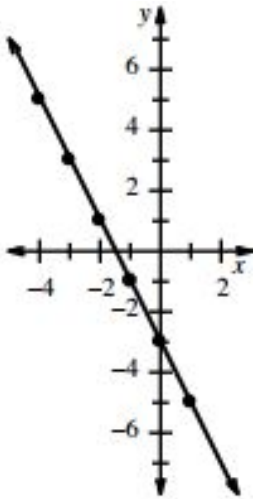
Complete the table for $y = -2x + 1$, then graph each of the points in the table.

input (x)	-4	-3	-2	-1	0	1	2	3	4	x
output (y)										



Example 4

Make an $x \rightarrow y$ table for the graph at right, then write a rule for the table.

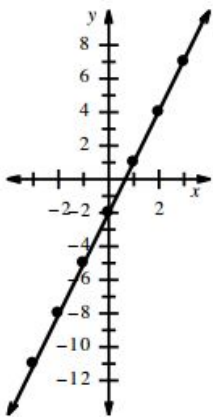


RULE:

x	y

Example 5

Use the graph to write a rule and find the input value for an output of -10.



Example 6

Write a rule for the number of squares in figure x.

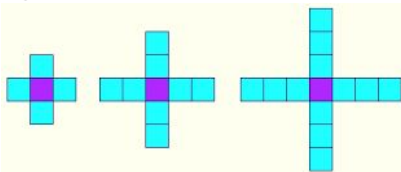


Fig 1

Fig 2

Fig 3