

1.4

# Algebra 1 Agenda

				Stamp
Monday	9/14/2015	Objective:	Domain & Range	
		Assignment:	Practice #1-9	
Tuesday	9/15/2015	Objective:	More Domain & Range	
		Assignment:	Finish In-Class Activity	
Wednesday	9/16/2015	Objective:	Domain & Range Applications	
		Assignment:	Practice #1-6	
Thursday	9/17/2015	Objective:	Evaluating & Identifying Functions	
		Assignment:	Practice #1-16	
Friday	9/18/2015	Objective:	Quiz!!	
		Assignment:	HW 1.4 Due!	

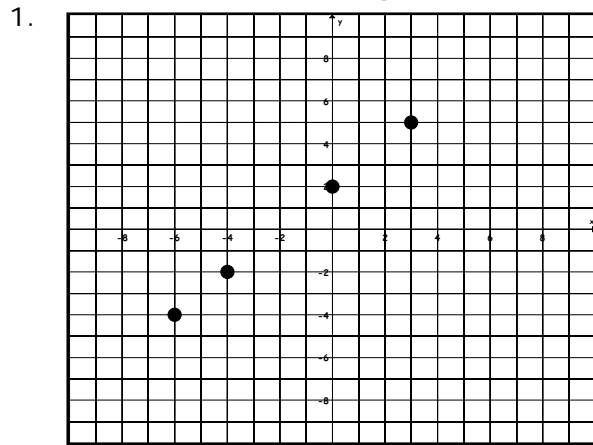
Monday: 1 <sup>st</sup> Attempt (DO NOT ERASE)	Correct Solution:
Tuesday: 1 <sup>st</sup> Attempt (DO NOT ERASE)	Correct Solution:
Wednesday: 1 <sup>st</sup> Attempt (DO NOT ERASE)	Correct Solution:
Thursday: 1 <sup>st</sup> Attempt (DO NOT ERASE)	Correct Solution:
Friday: 1 <sup>st</sup> Attempt (DO NOT ERASE)	Correct Solution:

<p><u>Warm Up Expectations:</u></p> <ul style="list-style-type: none"> <li>• Try warm up problem(s) on your own on the “First Attempt” side.</li> <li>• Politely request teacher signature when complete before timer goes off.</li> <li>• Copy the correct work/solution in the right-hand box.</li> <li>• Ask questions ☺</li> </ul> <p><b>When absent...</b> Write the word “ABSENT” on the first attempt column for 2 points. Copy the correct solution from a shoulder partner on the correct solution column for 1 point.</p>	<p><u>Warm Up Daily Scores Guide:</u></p> <table border="1"> <tr> <td>3</td> <td> <ul style="list-style-type: none"> <li>• Complete first attempt</li> <li>• Teacher signature</li> <li>• Completed correct solution</li> </ul> </td> </tr> <tr> <td>2</td> <td> <ul style="list-style-type: none"> <li>• Two of the three listed above are present</li> </ul> </td> </tr> <tr> <td>1</td> <td> <ul style="list-style-type: none"> <li>• One of the three listed above are present</li> </ul> </td> </tr> <tr> <td>0</td> <td> <ul style="list-style-type: none"> <li>• None of the three listed above are present</li> </ul> </td> </tr> </table>	3	<ul style="list-style-type: none"> <li>• Complete first attempt</li> <li>• Teacher signature</li> <li>• Completed correct solution</li> </ul>	2	<ul style="list-style-type: none"> <li>• Two of the three listed above are present</li> </ul>	1	<ul style="list-style-type: none"> <li>• One of the three listed above are present</li> </ul>	0	<ul style="list-style-type: none"> <li>• None of the three listed above are present</li> </ul>
3	<ul style="list-style-type: none"> <li>• Complete first attempt</li> <li>• Teacher signature</li> <li>• Completed correct solution</li> </ul>								
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0	<ul style="list-style-type: none"> <li>• None of the three listed above are present</li> </ul>								

**Practice - Domain and Range of Graphs**

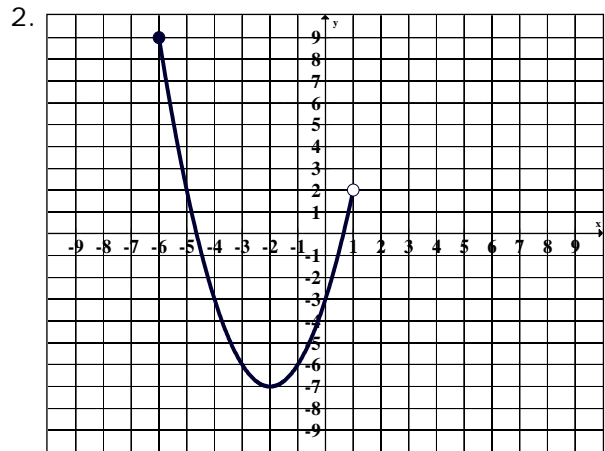
Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_

**Find the domain and range of the following graphs.**



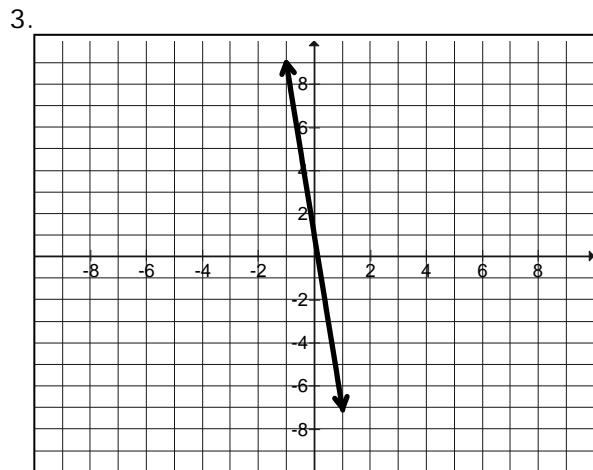
Domain:

Range:



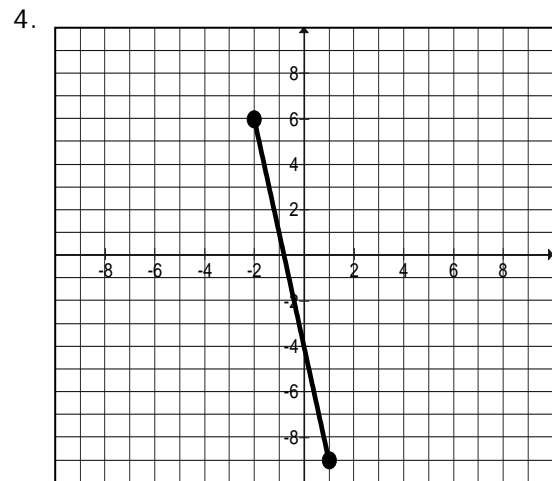
Domain:

Range:



Domain:

Range:

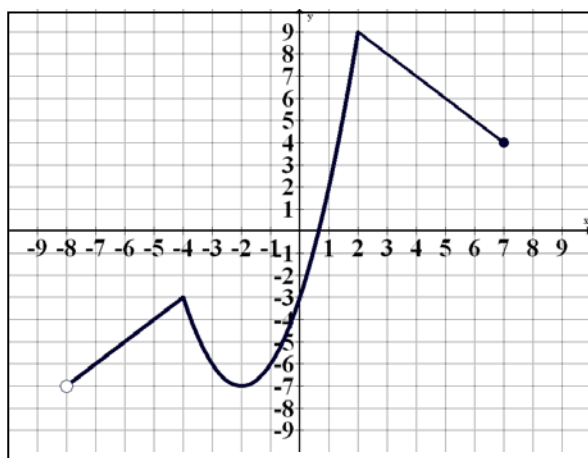


Domain:

Range:

# Algebra 1 Unit 2 – Domain and Range of Graphs

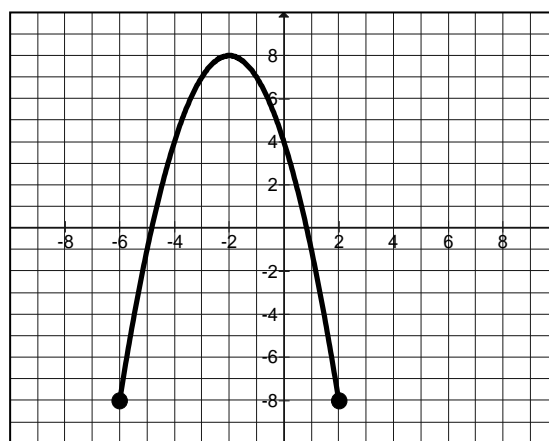
5.



Domain:

Range:

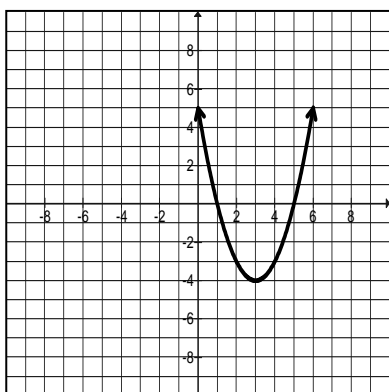
6.



Domain:

Range:

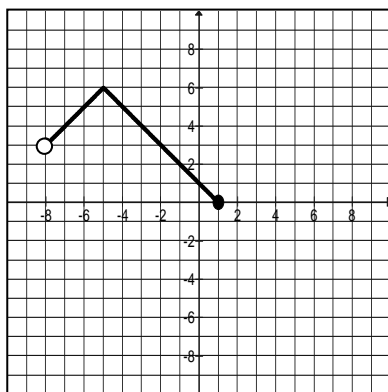
7.



Domain:

Range:

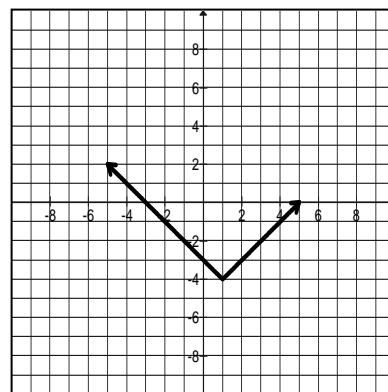
8.



Domain:

Range:

9.



Domain:

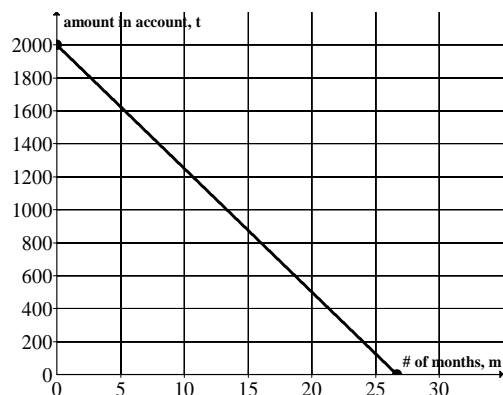
Range:

**Practice – Domain and Range Real World Applications**

Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_

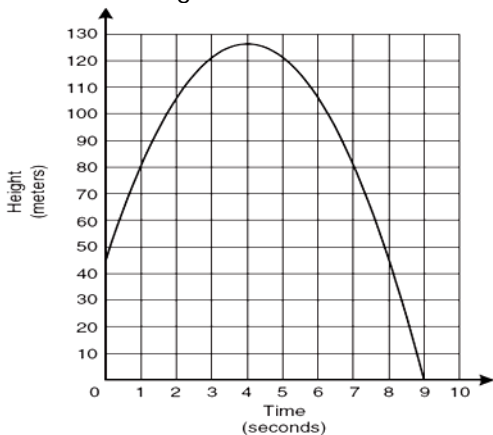
**Answer the following questions**

1. The graph below shows the relationship between the amount of money left in Shannon's bank account and the number of months that she has been making withdrawals.



What is the range of the situation graphed above?

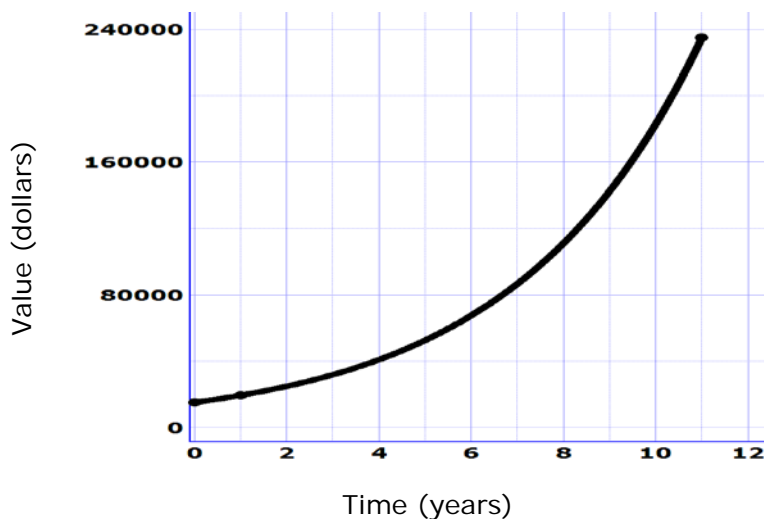
2. The graph below shows the height of a baseball from the time it is thrown from the top of a building to the time it hits the ground.



- A. What is the domain for the situation that is graphed above?
- B. What is the range for the situation that is graphed above?

## Algebra 1 Unit 2 Domain and Range Real World Applications

3. Air Force One can travel 630 miles per hour. Let  $x$  be the number of hours traveled. The function that gives the distance  $y$  in miles that Air Force One travels in  $x$  hours can be modeled by the equation  $y = 630x$ . If Air Force One can only travel for 18 hours before making a stop, what are reasonable range values for the situation described?
4. The formula to convert a temperature that is in degrees Celsius,  $x$ , to degrees Fahrenheit,  $y$ , is  $y = \frac{9}{5}x + 32$ . What are reasonable values for the range when you convert to Fahrenheit the temperature of water as it rises from  $0^\circ$  to  $100^\circ$  Celsius?
5. The relationship between that value of a business and the amount of time it has been in operation is shown on the graph below.



If the business were to be in operation for only 9 years, what would be the range of the situation based on the graph above?

6. The temperature of a cup of hot chocolate as it is warming is modeled by the equation  $y = 15 + 3x$  where  $y$  is the temperature at time,  $x$  (in minutes). What are reasonable domain and range values if the hot chocolate warms for five minutes?

**Practice –Evaluating & Identifying Functions**

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Find values for the following functions:**

1.  $f(x) = 3x + 7$

a.  $f(3) =$

b.  $4(f(1)) =$

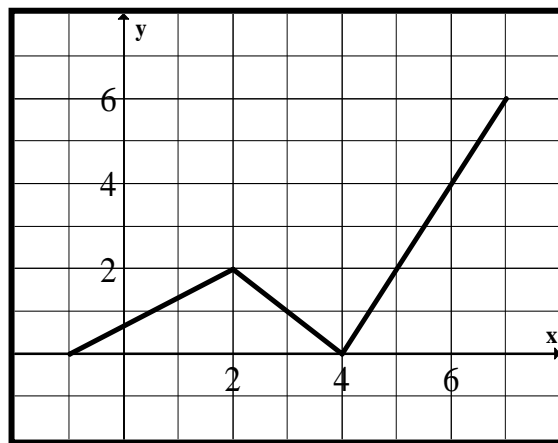
2.  $g(x) = x^2 - 1$

a.  $g(-2) =$

b.  $-3[g(1)] =$

3. If a function is defined by  $f(x) = x^2 - 5$  and the domain is  $\{2, 5\}$ , what are the dependent values?4. If  $f(x) = 3x^2 + 4x - 6$ , then what is  $f(\odot)$ ?5. What is the input when the output is 58, using the function  $A(n) = -5 + (n - 1)(3)$ ?**Use the graph to the right to answer the following questions.**6. What is the value of  $f(4)$ ?7. For what value or values of  $x$  does  $f(x) = 2$ ?8. For what  $x$ -values is  $f(x)$  greater than or equal to 2?

9. What are the domain and range of the function shown on the graph?



## Algebra 1 Unit 2 Identifying Functions

10. Does the following relation represent a function?

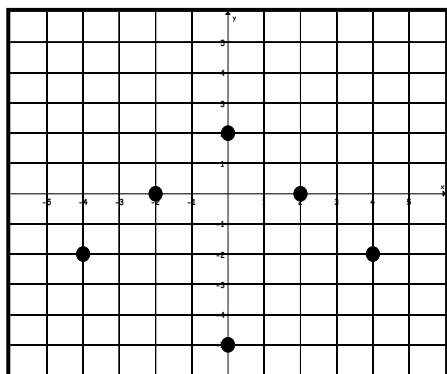
$\{(-2, 9), (-1, 3), (0, 1), (1, 3), (2, 9)\}$

Function

Not a Function

Why? \_\_\_\_\_

11.



Function

Not a Function

Why? \_\_\_\_\_

\_\_\_\_\_

12. Which of the following sets does not represent  $y$  as a function of  $x$ ?

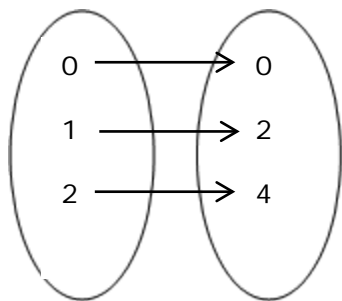
A  $\{(-3, -3), (2, 2), (3, 3), (5, 5), (7, 7)\}$

B  $\{(-3, 5), (-1, 0), (2, -3), (5, 5), (6, 0)\}$

C  $\{(-3, -5), (2, 2), (1, 3), (-3, 2), (3, 4)\}$

D  $\{(-8, -5), (-6, -3), (2, 6), (-6, -3), (8, 3)\}$

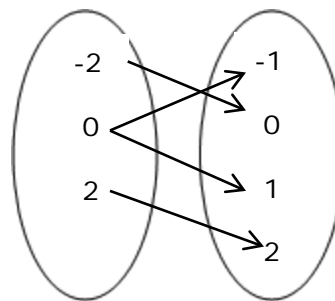
13.



Function

Not a Function

7.

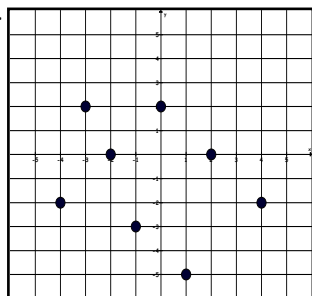


Function

Not a Function

**Determine which of the relations below are functions.**

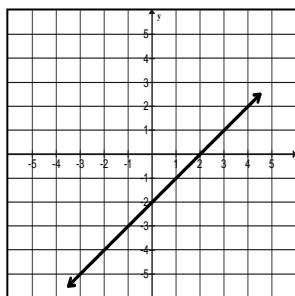
14.



Function

Not a Function

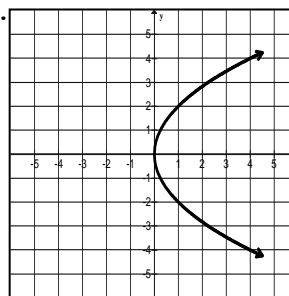
15.



Function

Not a Function

16.



Function

Not a Function