Name:_____ Hour: _____ Date: _____

NOTES: Domain and Range

Goals: #1 – I can use interval notation to denote a function's domain and range.

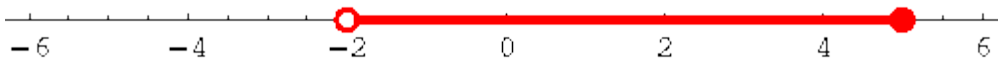#2 – I can determine the domain and range of a function when given a graph.

#3 – I can identify the domain and range of any function.   😎   😬   😢

Homework: Domain & Range Worksheet

Exploration #1:

1. How could we represent the set of numbers that are shaded in RED?

Review: How do we define domain and range?

DOMAIN: _____

RANGE: _____

Notes:

We use _____ to denote a function's domain and range.

When listing domain and range, we list the _____ possible value on the _____
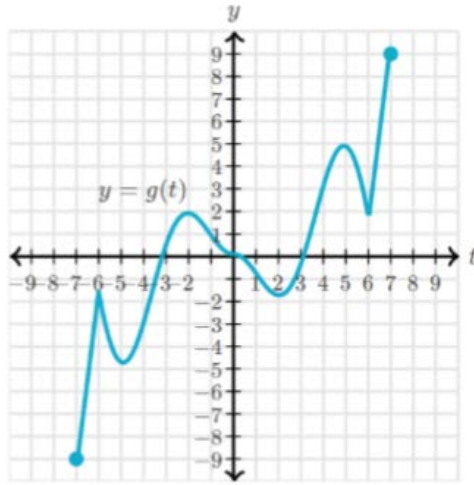
and the _____ possible value on the _____.

_____, _____

We use _____ to include a value in the set.

We use _____ to NOT include a value in the set.

Name:_____ Hour: _____ Date: _____

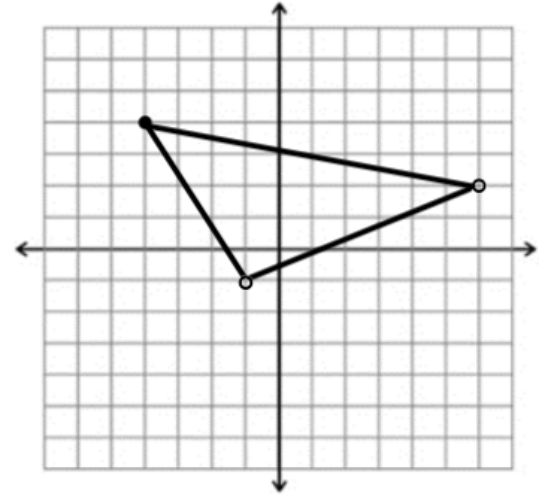**Example #1:** Identify the domain and range of the relations graphed below. Use interval notation.

a.

$y = g(t)$

b.

Domain: _____

Domain: _____

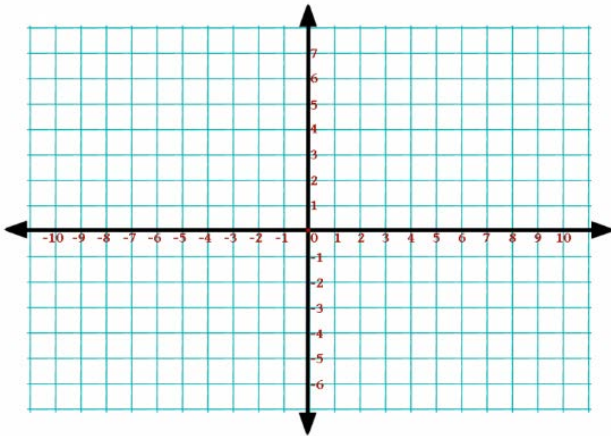Range: _____

Range: _____

Example #2: Graph the function using any method. Identify the function's domain and range using interval notation.

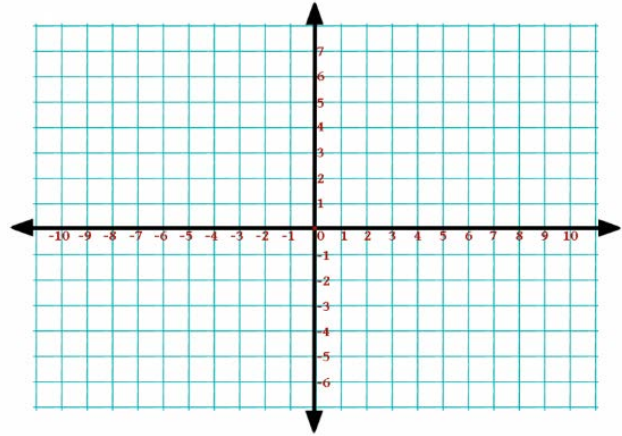a. $y = -3x + 2$ for $x > 0$

b. $y = -2|x - 4| + 7$

Domain: _____

Domain: _____

Range: _____

Range: _____

Example #3: Jason had a summer job that paid \$7.00 an hour and he worked between 15 and 35 hours every week. His weekly salary can be modeled by the equation: $S = 7h$, where S is his weekly salary and h is the number of hours he worked in a week.

    a. Describe a reasonable domain and range for the situation.

       Domain: _____

       Range: _____