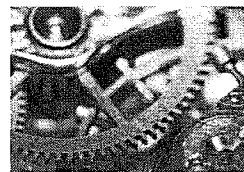


## Ready, Set, Go!



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## Ready

Topic: Determine domain and range, and whether a relation is a function or not a function.

**Determine if each set of ordered pairs is a function or not then state the domain and range.**

1.  $\{(-7, 2), (3, 5), (8, 4), (-6, 5), (-2, 3)\}$

Function: Yes / No

Domain:

Range:

2.  $\{(9, 2), (0, 4), (4, 0), (5, 3), (2, 7), (0, -3), (3, -1)\}$

Function: Yes / No

Domain:

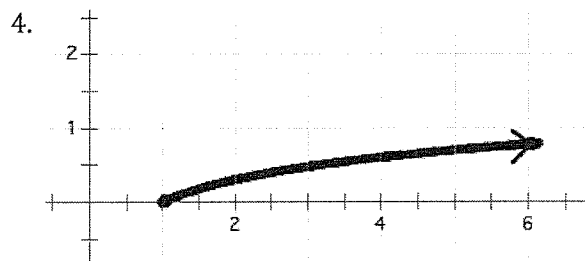
Range:

3.  $\{(1, 2), (2, 3), (3, 4), (4, 5), (5, 6), (6, 7), (7, 8), (8, 9)\}$

Function: Yes / No

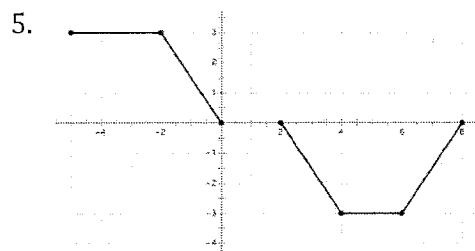
Domain:

Range:

**For the representation of the function given determine the domain and range.**

Domain:

Range:



Domain:

Range:

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# Features of Functions | 5.8

6.  $f(x) = -2x + 7$

Domain:

Range:

7.  $g(x) = 3(5)^x$

Domain:

Range:

8. The elements in the table define the entirety of the function.

Domain:

Range:

x	h(x)
1	9
2	98
3	987
4	9876

## Set

Topic: Determine whether or not the relationship is a function.

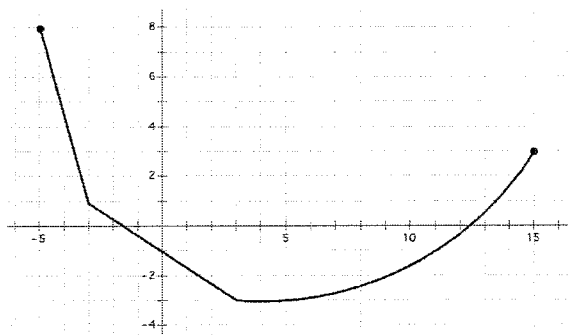
**Determine if the relationship presented is a function or not and provide a justification.**

- The distance a person is from the ground related to time as they ride a Ferris Wheel.
- The amount of daylight during a day throughout the calendar year.
- The value of a Volkswagen Bug convertible from time of first purchase in 1978 to now.
- A person's name and their phone number.
- The stadium in which a football player is playing related to the outcome of the game.

## Go

Topic: Determining features of functions and finding solutions using functions.

14. For the graph given below provide a description of the function. Be sure to consider the following: decreasing/increasing, min/max, domain/range, etc.



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# Features of Functions | 5.8

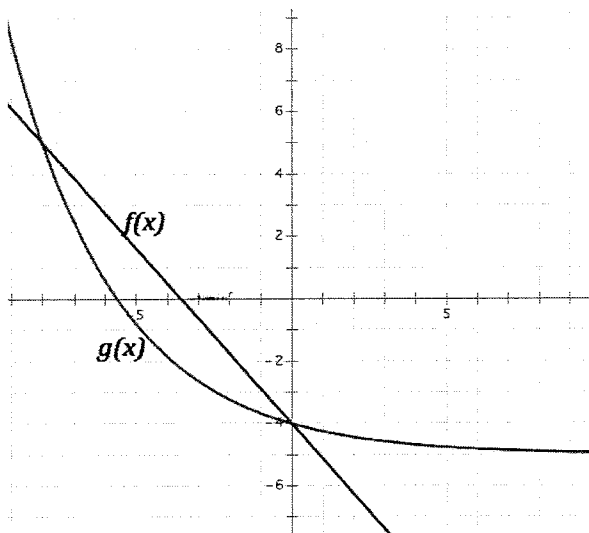
15. For the given situation use the given function to find and interpret solutions.

*Hope has been tracking the progress of her family as they travel across the country during their vacation and she has created a function,  $d(t) = 78t$  to model the progress they are making.*

- What would Hope be attempting to find if she writes " $d(4) = 78(4)$ " ?
- What would  $d(t) = 450$  mean in this situation?
- What would  $d(3.5)$  mean in this situation?
- How could Hope use the function to find the time it would take to travel 800 miles?

Use the given representation of the functions to answer the questions.

16.



- Where does  $f(x) = g(x)$  ?
- What is  $g(0) + f(0)$  ?
- On what interval(s) is  $g(x) > f(x)$ ?
- What is  $g(-8) + f(-8)$ ?

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