Ready, Set, Go!

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)}

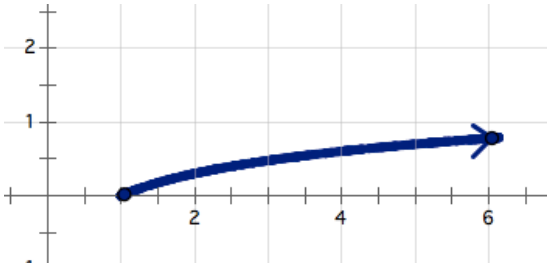
Function: Yes / No

Domain:

Range:

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

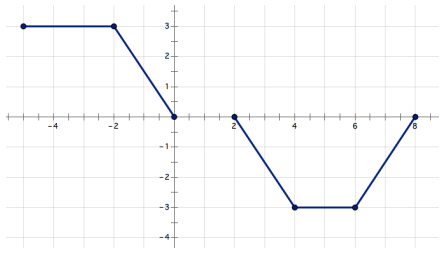
4.



Domain:

Range:

5.



Domain:

Range:

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.

9. The distance a person is from the ground related to time as they ride a Ferris Wheel.

10. The amount of daylight during a day throughout the calendar year.

11. The value of a Volkswagen Bug convertible from time of first purchase in 1978 to now.

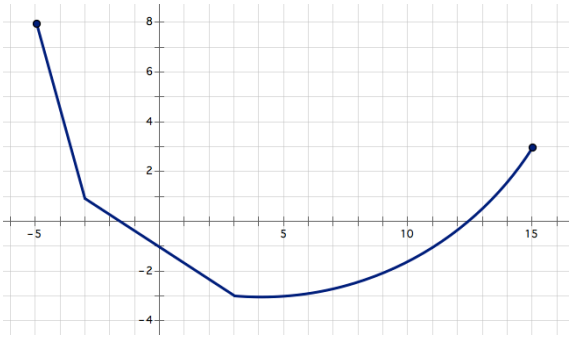
12. A person's name and their phone number.

13. 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.



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.

a. What would Hope be attempting to find if she writes "d(4)= 78(4)" ?

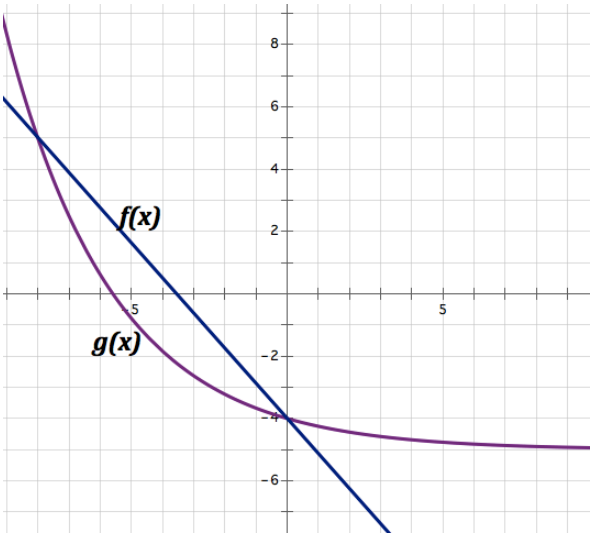
b. What would d(t)= 450 mean in this situation?

c. What would d(3.5) mean in this situation?

d. 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.



a. Where does $f(x) = g(x)$?

b. What is $g(0) + f(0)$?

c. On what interval(s) is $g(x) > f(x)$?

d. What is $g(-8) + f(-8)$?