

# Functions Review Worksheet

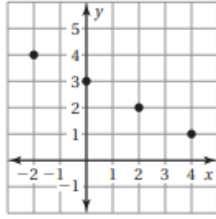
Name: \_\_\_\_\_

Find the domain and range of the function.

1.

Domain: \_\_\_\_\_

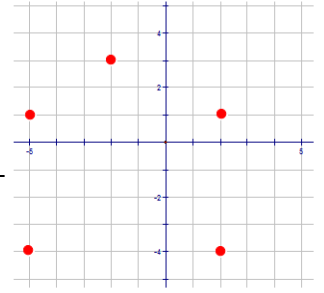
Range: \_\_\_\_\_



2.

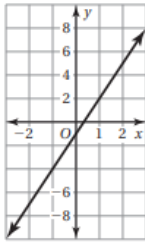
Domain: \_\_\_\_\_

Range: \_\_\_\_\_

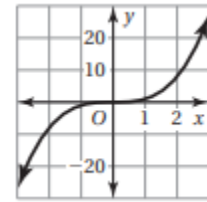


Tell whether the graph represents a LINEAR or NONLINEAR function.

3. \_\_\_\_\_

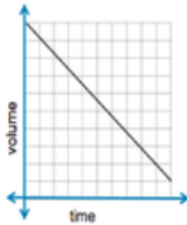


4. \_\_\_\_\_

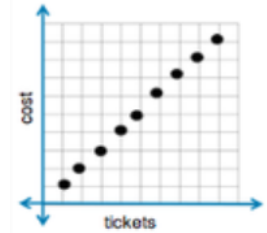


Tell whether the graph represents a DISCRETE or CONTINUOUS domain.

5. \_\_\_\_\_



6. \_\_\_\_\_



The total cost,  $y$ , of admission &  $x$  tickets for an amusement park are shown in the table. .

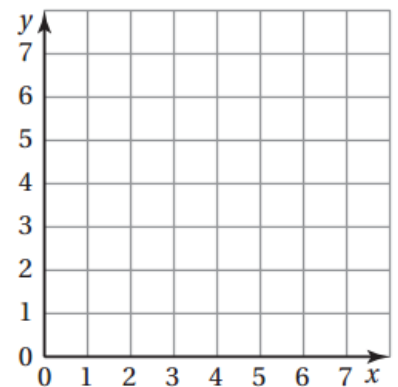
Tickets, $x$	0	1	2	3
Cost, $y$	3	4	5	6

7. Find the domain and range of the function.

D: \_\_\_\_\_ R: \_\_\_\_\_

Is the domain discrete or continuous?

8. Graph the function. Don't forget to label the axes!



9. Complete the input-output table for the function  $y = 3x - 2$ .

$x$	-1	0	1	2
$y$				

What are the domain and range?

D: \_\_\_\_\_ R: \_\_\_\_\_

Is the domain of the function DISCRETE or CONTINUOUS?

12. \_\_\_\_\_

Input Length, $x$ (inches)	Output Area, $y$ (square inches)
2	12
4	24
6	36

13. \_\_\_\_\_

Input Shirts, $x$	Output Cost, $y$ (dollars)
0	0
1	9.25
2	18.50

14. Circle the input that represents a function with a CONTINUOUS domain.

time spent on homework OR number of missing assignments

Tell whether the table or equation represents a LINEAR or NONLINEAR function.

15. \_\_\_\_\_

$x$	$y$
1	1
2	4
3	9
4	16

16. \_\_\_\_\_

$x$	$y$
-2	3
0	7
2	11
4	15

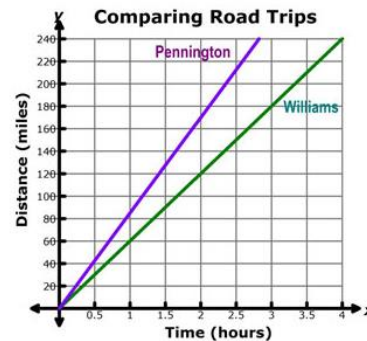
17. \_\_\_\_\_

$$y = \frac{3}{4}x - 1$$

18. \_\_\_\_\_

$$y = 4x^2 + 2$$

19. Who is travelling faster? How do you know?



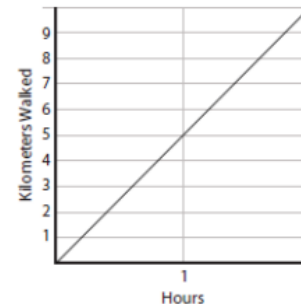
Below are representations of Tanner, Hunter & Casey's speed as they walk. How fast are each of them walking? Be sure to label your answer!!

Tanner:

$x$ (hours)	$y$ (km)
0	0
2	9
4	18
6	27

Hunter:  $y = \frac{13}{4}x$

Casey:



Tanner: \_\_\_\_\_

Hunter: \_\_\_\_\_

Casey: \_\_\_\_\_

Who is walking the fastest? \_\_\_\_\_