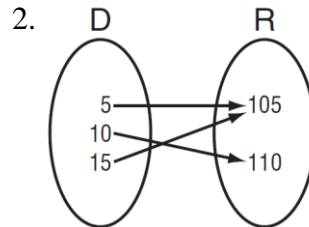
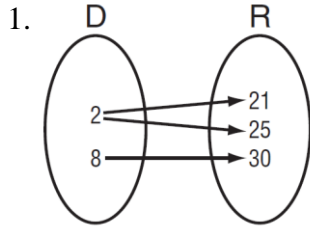


Name: _____

Period: _____

SM2H 1.1 Functions Homework 2019-20**Decide whether each relation is a function. Then write the relation as a set of ordered pairs.**

3.

x	y
-3	0
-1	-1
0	0
2	-2
3	4

Determine whether each relation is a function. Then find the domain and range.

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

Function:

D:

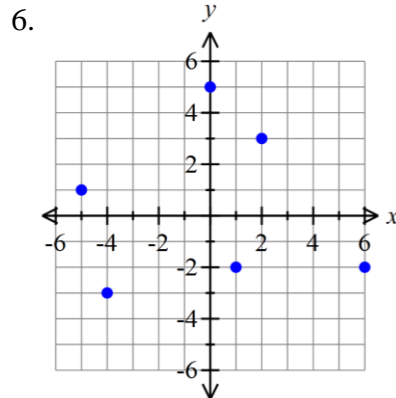
R:

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

Function:

D:

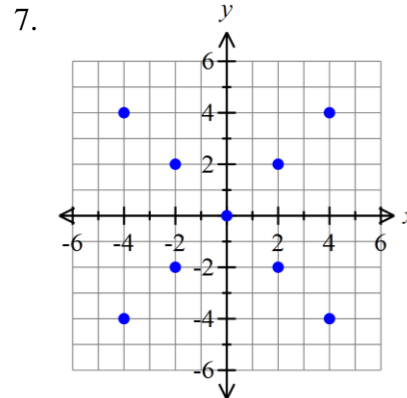
R:

Determine whether each graph represents a function. Then find the domain and range.

Function:

D:

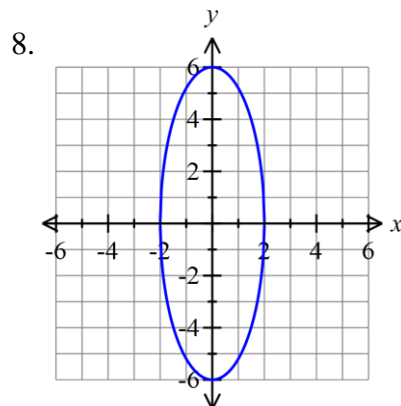
R:



Function:

D:

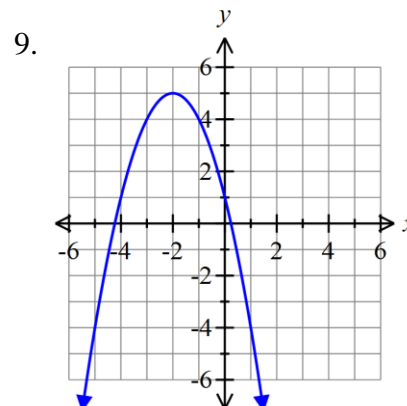
R:



Function:

D:

R:



Function:

D:

R:

Find each value if $f(x) = x^2 - 4x + 5$, $g(x) = 2x - 7$, and $h(x) = \frac{x}{3 - 2x}$. Leave your answers as simplified fractions, if necessary. Show all your work.

10. $f(2)$ 11. $g(-1)$ 12. $h(4)$

13. $g(7)$ 14. $f(-5)$ 15. $h(-3)$

16. $h(10)$ 17. $g(-\frac{1}{2})$ 18. $f(-9)$

19. $g(n+1)$ 20. $h(2m)$ 21. $f(-v)$

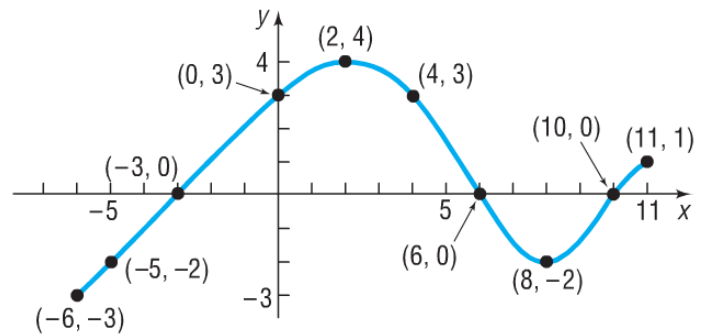
The graph of $y = f(x)$ is shown below. Use it to answer the following questions.

22. Find $f(-5)$.

23. Find $f(0)$.

24. Find $f(10)$.

25. Find $f(-6)$.



26. For what values of x is $f(x) = 0$?

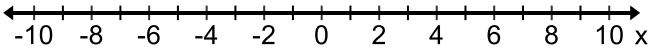
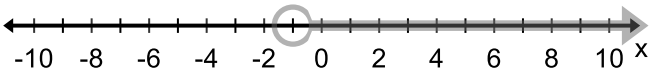
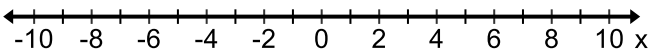
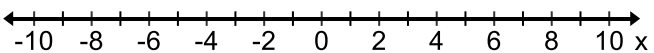
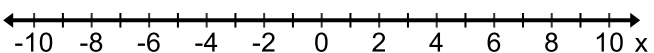
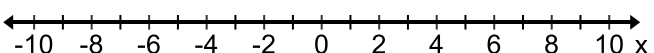
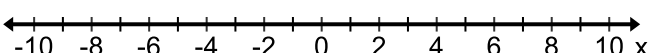
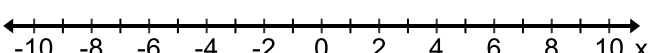
27. For what values of x is $f(x) = -2$?

28. For what values of x is $f(x) = 3$?

29. What is the domain?

30. What is the range?

Complete the following table.

	Inequality	Graph	Interval Notation
31.			$(-\infty, 5)$
32.			
33.	$x > -6$		
34.			$[-7, \infty)$
35	$-5 < x \leq 6$		
36.			$[-2, 9)$
37.	$x \leq -3$ or $x > 8$		
38.			$(-\infty, 1] \cup (3, \infty)$