

## Assignment 2-1 Functions Introduction

**Sec 1**

**Unit 2**

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 or No

Domain:

Range:

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

Function: Yes or No

Domain:

Range:

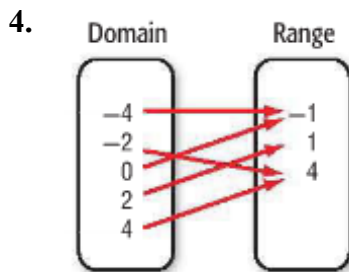
3.  $\{(1,2), (2,3), (3,4), (4,5), (5,6), (6,7), (7,8), (8,9)\}$

Function: Yes or No

Domain:

Range:

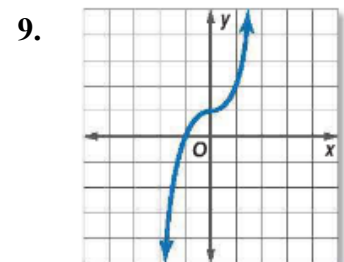
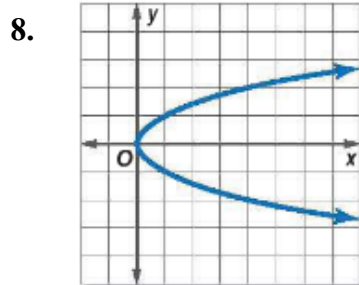
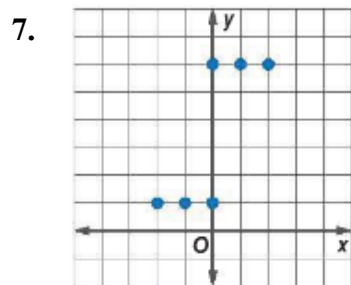
Determine whether each relation is a function. Explain.



5.

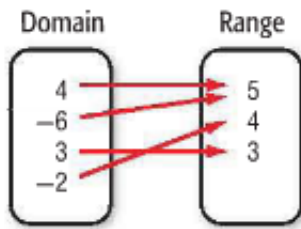
Domain	Range
2	6
5	7
6	9
6	10

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

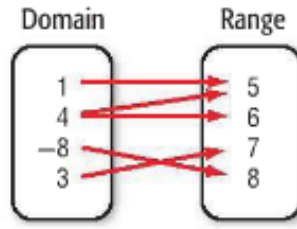


Determine whether each relation is a function. Explain.

10.



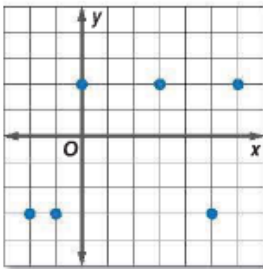
11.



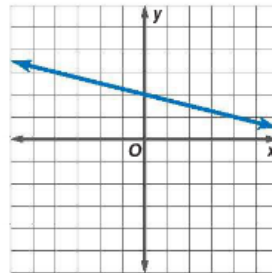
12.

Domain	Range
4	6
-5	3
6	-3
-5	5

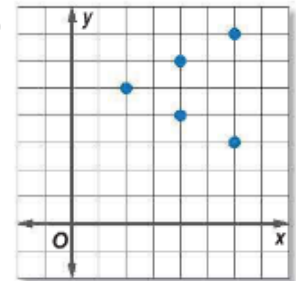
13.



14.



15.



If  $f(x) = 6x + 7$  and  $g(x) = x^2 + 4x$ , find each value.

16.  $f(-3)$

20.  $g(r)$

24.  $g(7) + 2$

17.  $g(4)$

21.  $f(a)$

25.  $2 + f(-9)$

18.  $g(-2)$

22.  $g(3) + f(-4)$

19.  $f(9)$

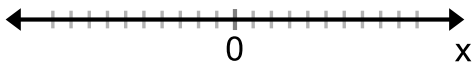
23.  $g(6) + f(0)$

Graph the inequalities on a number line.

26.  $x \geq 3$



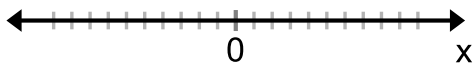
27.  $x \leq 7$



28.  $-5 < x$



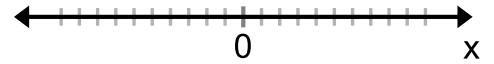
29.  $x < -4$



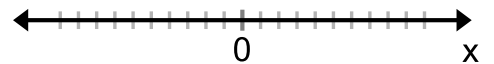
30.  $-8 \leq x < 5$



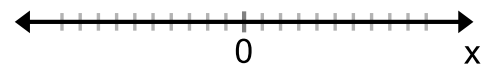
31.  $x \geq 2$  or  $x < -3$



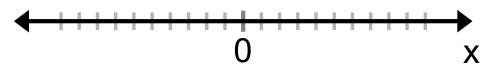
32.  $-4 < x < 2$



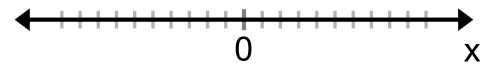
33.  $-3 < x \leq 0$



34.  $x \leq -5$  or  $x > 1$

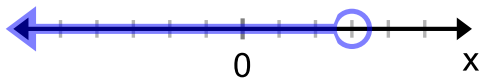


35.  $x \geq 0$  or  $x \leq -6$

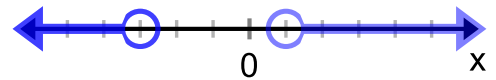


Write the inequality to represent the given graph.

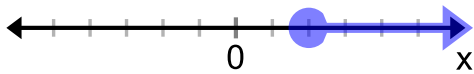
36.



38.



37.



39.

