

## 2-1 Functions

Name \_\_\_\_\_

Let  $f(x) = 3x - 10$      $g(x) = x^2$      $h(x) = 2^x$

Find each value below.

1.  $f(4) =$  \_\_\_\_\_

2.  $g(-3) =$  \_\_\_\_\_

3.  $h(3) =$  \_\_\_\_\_

4.  $f(-10) =$  \_\_\_\_\_

5.  $g(0) =$  \_\_\_\_\_

6.  $h(-1) =$  \_\_\_\_\_

7.  $g(10) =$  \_\_\_\_\_

8.  $f(-10) =$  \_\_\_\_\_

State the domain and range of each function.

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

10.  $\{(-2,4), (-1,0), (5,7)\}$

Domain = \_\_\_\_\_

Domain = \_\_\_\_\_

Range = \_\_\_\_\_

Range = \_\_\_\_\_

11.  $\{(2,1), (3,4), (3,7)\}$

12.  $\{(3,3), (-1,-1), (5,5)\}$

Domain = \_\_\_\_\_

Domain = \_\_\_\_\_

Range = \_\_\_\_\_

Range = \_\_\_\_\_

13. Which of the problems in 9-12 above were functions? \_\_\_\_\_

The chart below describes the percentage of my house that I had completed painting at the end of each day.

Day	1	2	3	4	5	6	7	8
Percentage Painted	10	15	25	45	70	80	90	100

14. If  $P(d)$  represents the percentage painted after  $d$  days, what is  $P(6)$ ? \_\_\_\_\_

15. On what day did I complete the most work? \_\_\_\_\_