

Algebra II
Functions #1

Name _____
Date _____

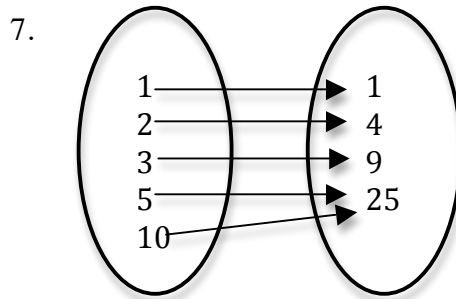
Circle the best answer.

1. The set of inputs is the _____ of the function.
 a. rule b. domain c. solution d. range
2. The set of outputs is the _____ of the function.
 a. rule b. domain c. solution d. range
3. The input variable is called the _____ variable.
 a. independent b. dependent c. solution d. identity
4. The output variable is called the _____ variable.
 a. independent b. dependent c. solution d. identity
5. In function notations, “ $f(x)$ ” is read:
 a. “ f times x ” b. “ f to the x ” c. “ f of x ” d. “fox”

Tell whether the following relations are functions (state “yes” or “no”). State the domain and range for each

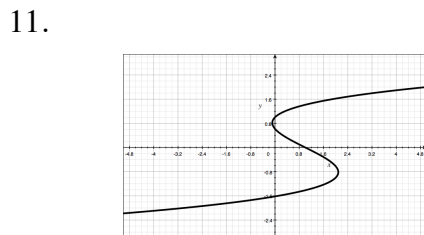
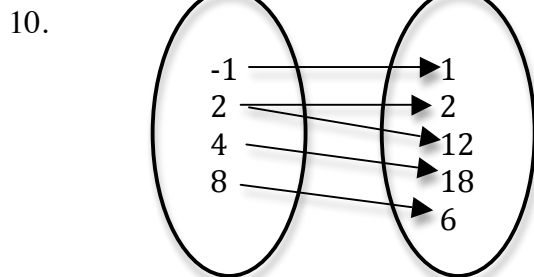
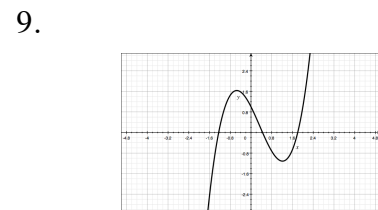
6.

x	y
-4	6
-3	3
0	0
0	1
6	10



8.

x	y
-8	9
-6	7
0	0
6	6
7	7



Plot and label the points and describe their locations.

12. $A(1, 2)$ _____

13. $B(4, 0)$ _____

14. $C(5, -4)$ _____

15. $D(-3, -1)$ _____

16. State the domain: _____

17. State the range: _____

Evaluate the following using $f(x) = 3x - 5$ and $g(x) = -x^2 - 2x + 1$.

18. $f(1) =$ _____

19. $g(-2) =$ _____

20. $g(3) =$ _____

21. $f(-4) =$ _____

22. $f(0) =$ _____

23. $g(-1) =$ _____

24. **Heat Index.** The table shows the apparent temperature P (in degrees Fahrenheit), or the temperature as it feels to your body, as a function of the air temperature A (in degrees Fahrenheit) when there is 10% humidity. Graph the function. Then use your graph to predict the apparent temperature when the air temperature is 105° F and the humidity is 10%.

Air Temperature ($^\circ$ F), A	70	75	80	85	90	95
Apparent Temperature ($^\circ$ F), P	65	70	75	80	85	90