

**Algebra II Class Worksheet #2 Unit 3 page 1**

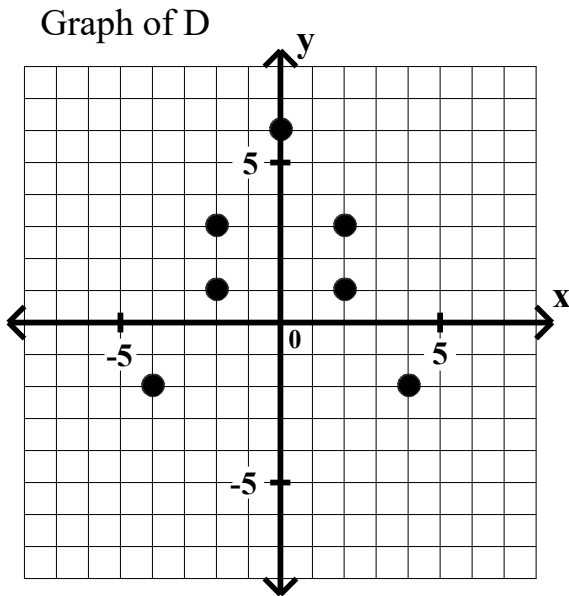
Determine whether or not the relation given in each problem is a function. (Write yes or no.)

\_\_\_\_\_ 1.  $A = \{ (5, -5), (3, -3), (1, -1), (0, 0), (1, 1), (3, 3), (5, 5) \}$

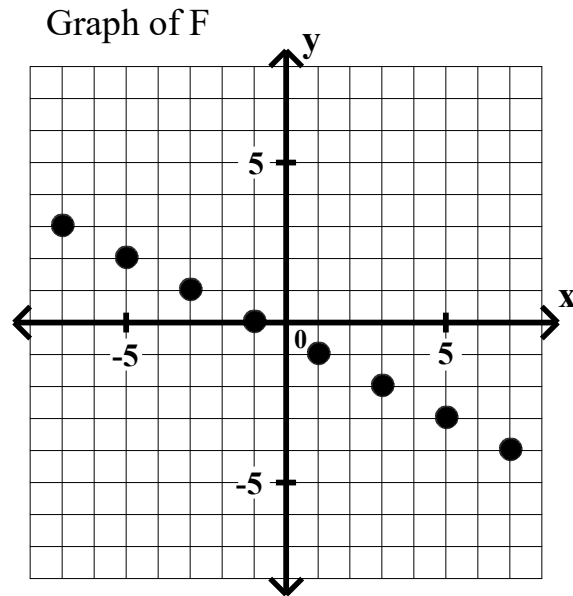
\_\_\_\_\_ 2.  $B = \{ (-3, 4), (-2, 4), (-1, 4), (0, 4), (1, 4), (2, 4), (3, 4) \}$

\_\_\_\_\_ 3.  $C = \{ (-3, 6), (-2, 4), (-1, 2), (0, 0), (1, -2), (2, -4), (3, -6) \}$

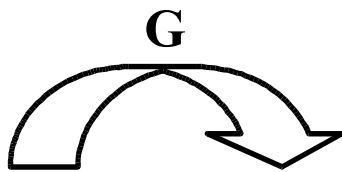
\_\_\_\_\_ 4. relation D



\_\_\_\_\_ 5. relation F

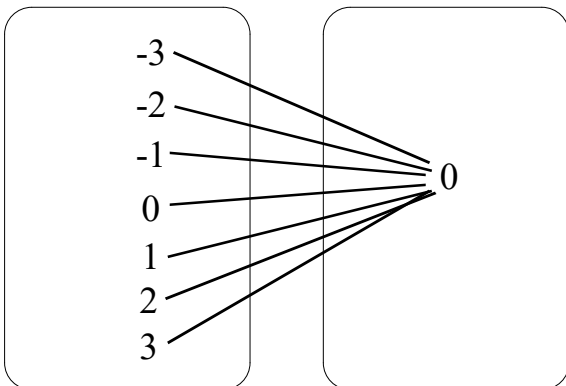


\_\_\_\_\_ 6. relation G

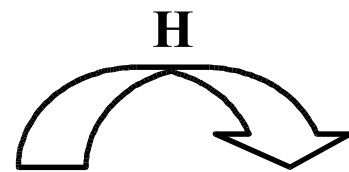


Domain of G

Range of G

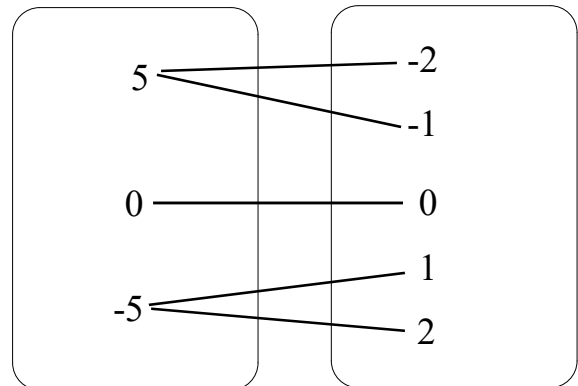


\_\_\_\_\_ 7. relation H



Domain of H

Range of H



## Algebra II Class Worksheet #2 Unit 3 page 2

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

8.  $f(-3) =$  \_\_\_\_\_      9.  $f(0) =$  \_\_\_\_\_      10.  $f(4) =$  \_\_\_\_\_  
 11.  $g(-3) =$  \_\_\_\_\_      12.  $g(0) =$  \_\_\_\_\_      13.  $g(4) =$  \_\_\_\_\_

Given: Functions H and L defined by the equation  $H(x) = -2x + 1$  and  $L(x) = x^3$ . Evaluate each of the following.

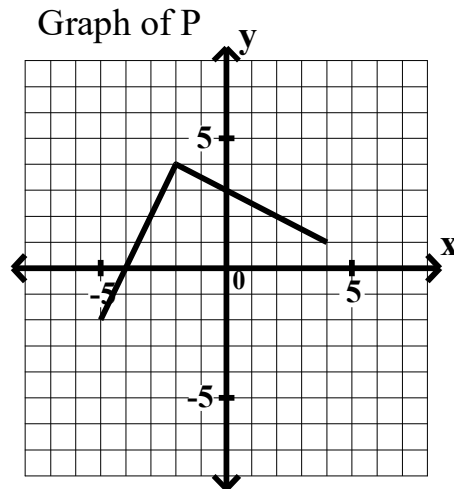
14.  $H(-3) =$  \_\_\_\_\_      15.  $H(0) =$  \_\_\_\_\_      16.  $H(4) =$  \_\_\_\_\_  
 17.  $L(-3) =$  \_\_\_\_\_      18.  $L(0) =$  \_\_\_\_\_      19.  $L(4) =$  \_\_\_\_\_

Given the function P defined by this graph.

20. What is the domain of P? \_\_\_\_\_  
 21. What is the range of P? \_\_\_\_\_

Evaluate each of the following.

22.  $P(-3) =$  \_\_\_\_\_  
 23.  $P(0) =$  \_\_\_\_\_  
 24.  $P(4) =$  \_\_\_\_\_



Given the function k defined by this graph.

25. What is the domain of k? \_\_\_\_\_  
 26. What is the range of k? \_\_\_\_\_

Evaluate each of the following.

27.  $k(-3) =$  \_\_\_\_\_  
 28.  $k(0) =$  \_\_\_\_\_  
 29.  $k(4) =$  \_\_\_\_\_

