

Algebra 1 Worksheet #3 Unit 8 page 1

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

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

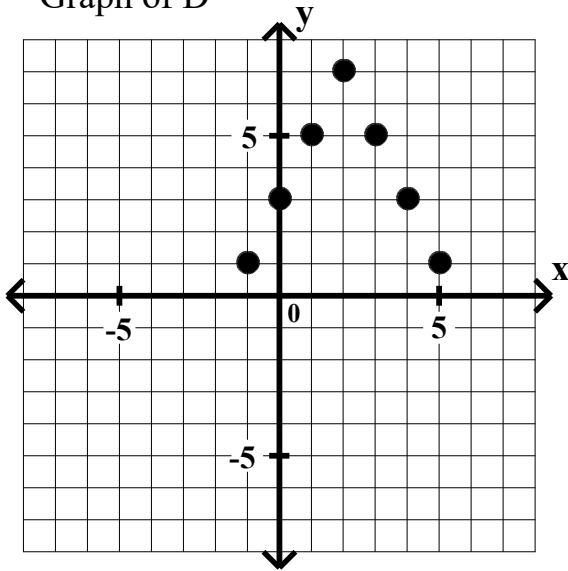
_____ 2. $B = \{(-3, 4), (-2, 3), (-1, 2), (0, 1), (1, 0), (2, -1), (3, -2)\}$

_____ 3. $C = \{(9, 3), (9, -3), (4, 2), (4, -2), (1, 1), (1, -1), (0, 0)\}$

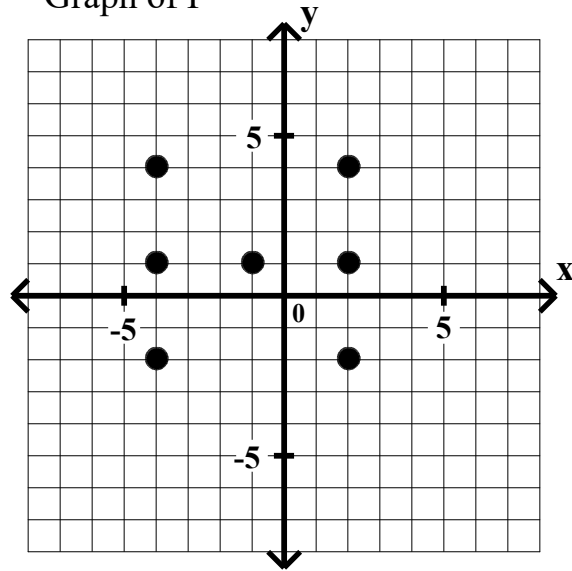
_____ 4. relation D

_____ 5. relation F

Graph of D



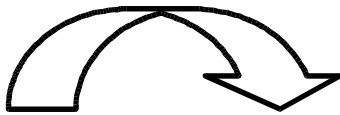
Graph of F



_____ 6. relation G

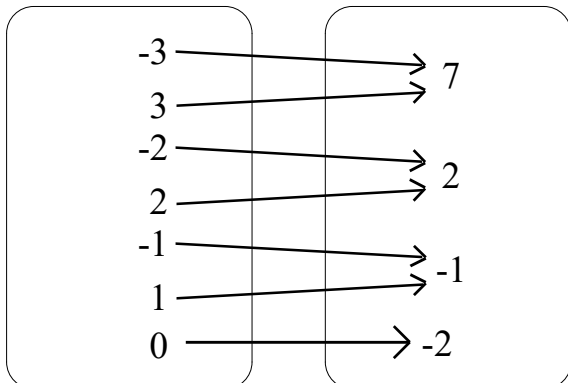
_____ 7. relation H

G



Domain of G

Range of G

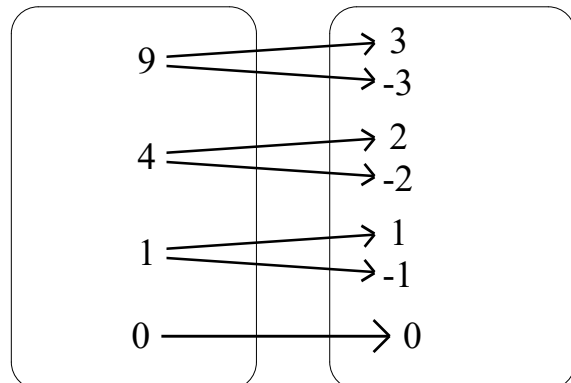


H



Domain of H

Range of H



Algebra 1 Worksheet #3 Unit 8 page 2

Given: Functions $f = \{ (x,y) : y = 3x + 5 \}$ and $g = \{ (x,y) : y = x^2 \}$. Evaluate each of the following.

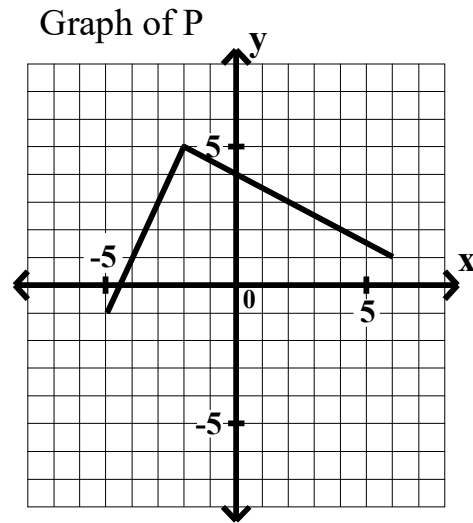
8. $f(-3) =$ _____ 9. $f(0) =$ _____ 10. $f(4) =$ _____
11. $g(-3) =$ _____ 12. $g(0) =$ _____ 13. $g(4) =$ _____

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. Write an inequality to describe the domain of P? _____
21. Write an inequality to describe the range of P? _____

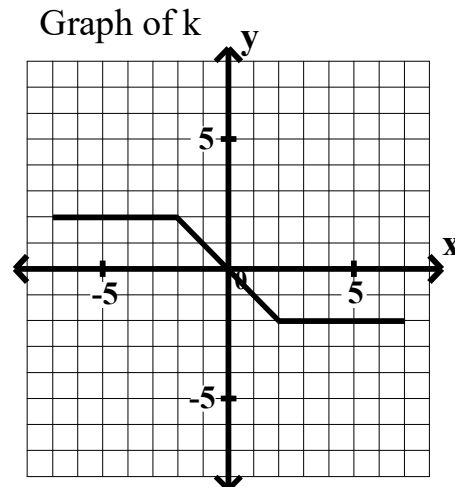


Evaluate each of the following.

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

Given the function k defined by this graph.

25. Write an inequality to describe the domain of k? _____
26. Write an inequality to describe the range of k? _____



Evaluate each of the following.

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