General Algebra 1 Worksheet #4 Unit 8 page 1 _____

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

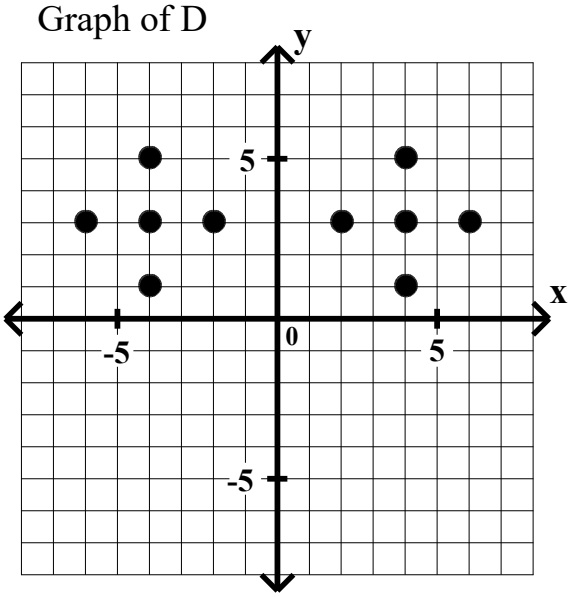
_____ 1. A = { (5 , 1) , (4 , 1) , (3 , 1) , (2, 1) , (1 , 1) , (0 , 1) }

_____ 2. B = { (1 , 5) , (1 , 4) , (1 , 3) , (1, 2) , (1 , 1) , (1 , 0) }

_____ 3. C = { (1 , 12) , (2 , 6) , (3 , 4) , (4, 3) , (6 , 2) , (12 , 1) }

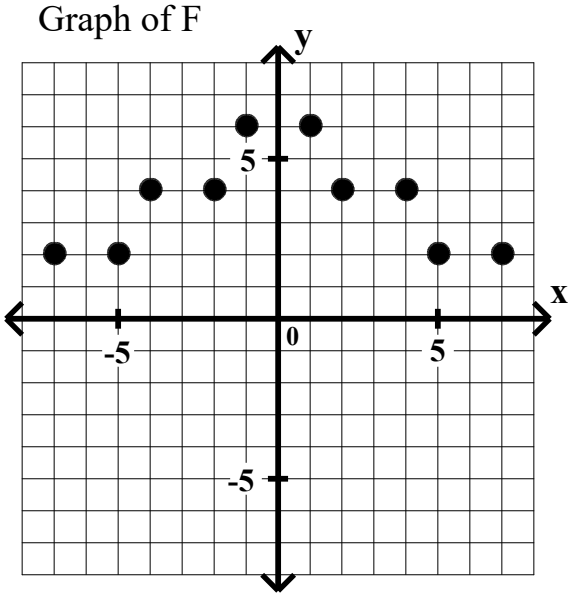
_____ 4. relation D

Graph of D



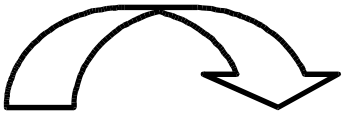
_____ 5. relation F

Graph of F

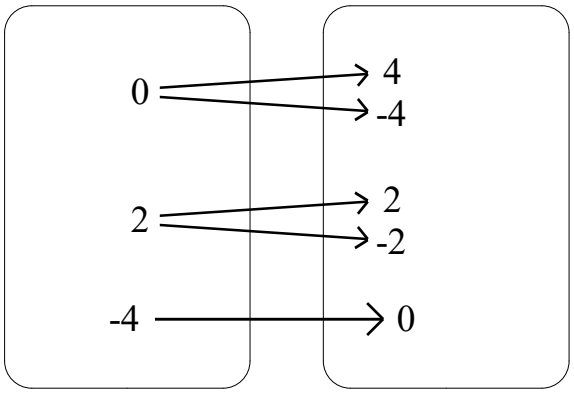


_____ 6. relation G

G

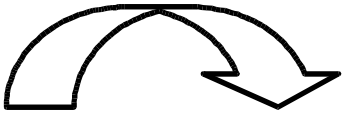


Domain of G Range of G

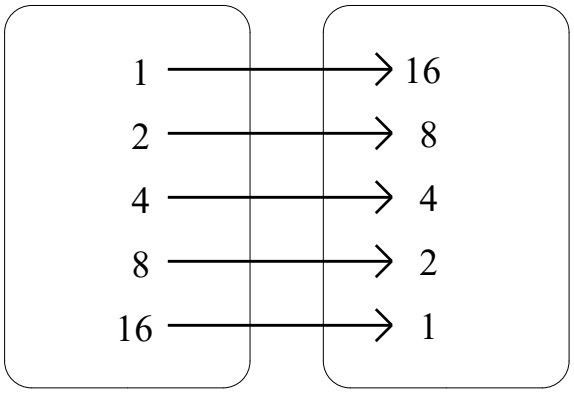


_____ 7. relation H

H



Domain of H Range of H



General Algebra 1 Worksheet #4 Unit 8 page 2

Given: Functions f = { (x,y) : **y = -3x – 1** } and g = { (x,y) : **y = -2x²** }. Evaluate each of the following.

8. f(-2) = _____ 9. f(0) = _____ 10. f(5) = _____

11. g(-2) = _____ 12. g(0) = _____ 13. g(5) = _____

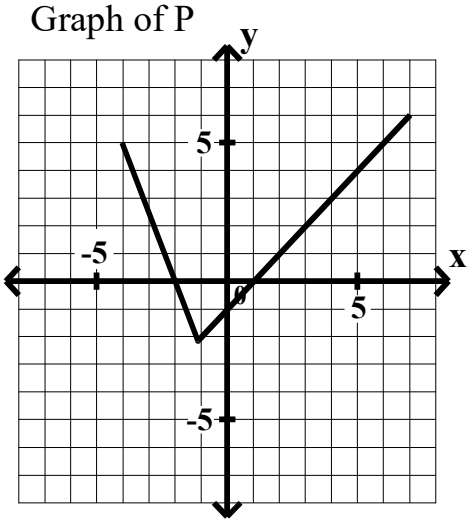
Given: Functions H and L defined by the equation **H(x) = 5x – 7** and **L(x) = -2x³**. Evaluate each of the following.

14. H(-2) = _____ 15. H(0) = _____ 16. H(5) = _____

17. L(-2) = _____ 18. L(0) = _____ 19. L(5) = _____

Given the function P defined by this graph.

Graph of P



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.

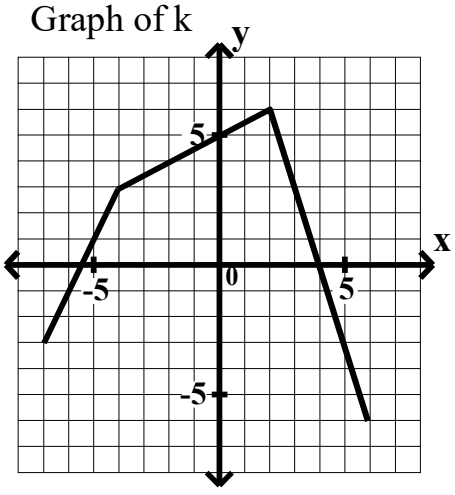
22. P(-2) = _____

23. P(0) = _____

24. P(5) = _____

Given the function k defined by this graph.

Graph of k



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(-2) = _____

28. k(0) = _____

29. k(5) = _____