General Algebra II Worksheet #2 Unit 6 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) }**

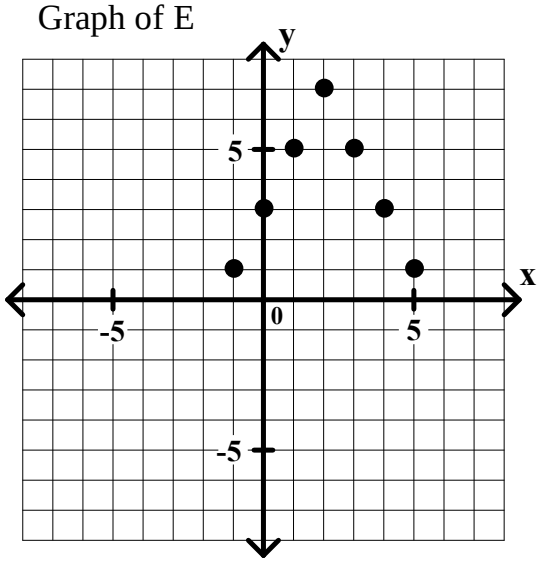
_____ **2. B = { (-3 , 4) , (-2 , 3) , (-1 , 2) , (0, 1) , (1 , 0) , (2 , -1) , (3 , -2) }**

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

_____ **4. D = { (0 , 1) , (1 , 3) , (2 , 3) , (3, 3) , (-1 , -1) , (-2 , -1) , (-3 , -1) }**

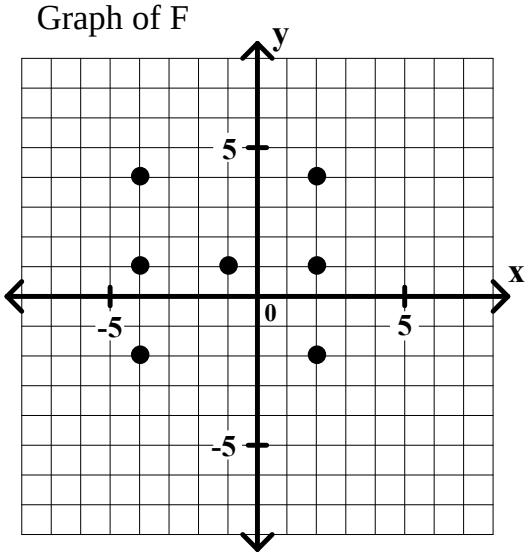
_____ **5. relation E**

Graph of E



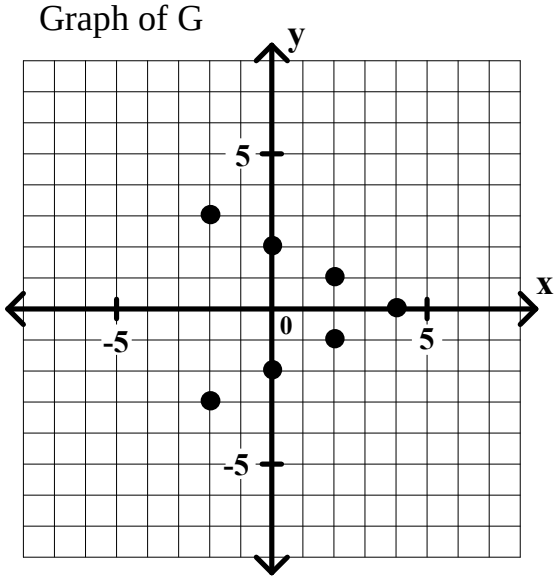
_____ **6. relation F**

Graph of F



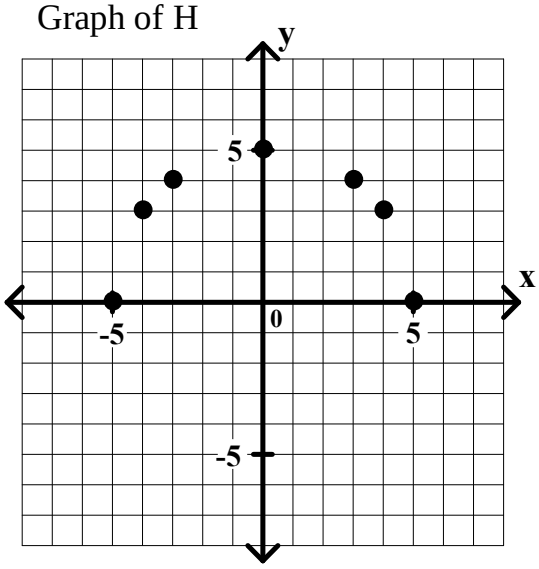
_____ **7. relation G**

Graph of G



_____ **8. relation H**

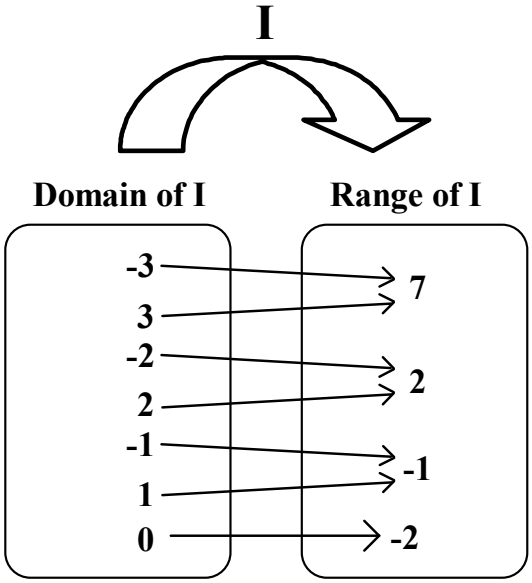
Graph of H



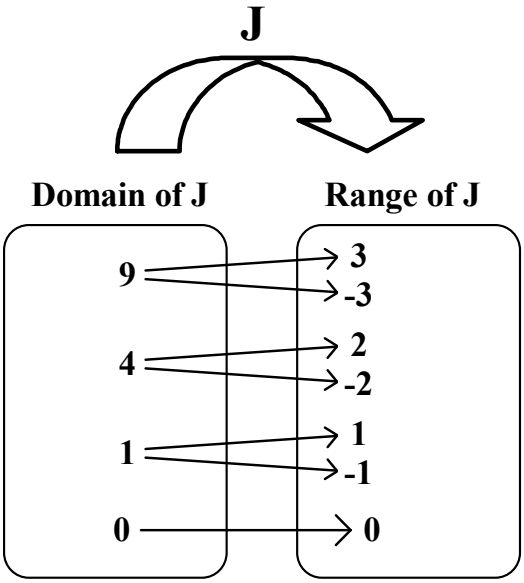
General Algebra II Worksheet #2 Unit 6 page 2

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

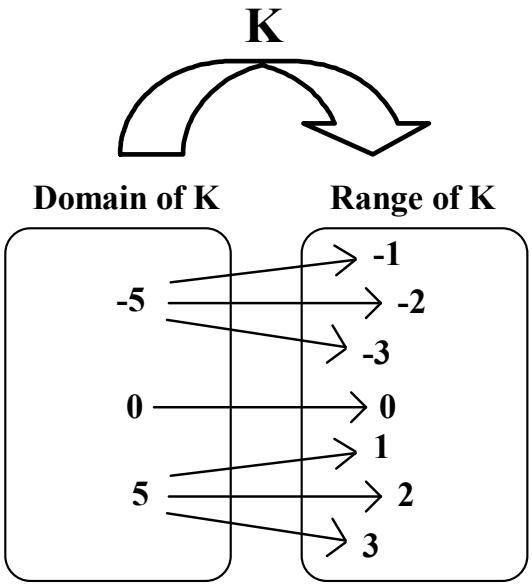
_____ **9. relation I**



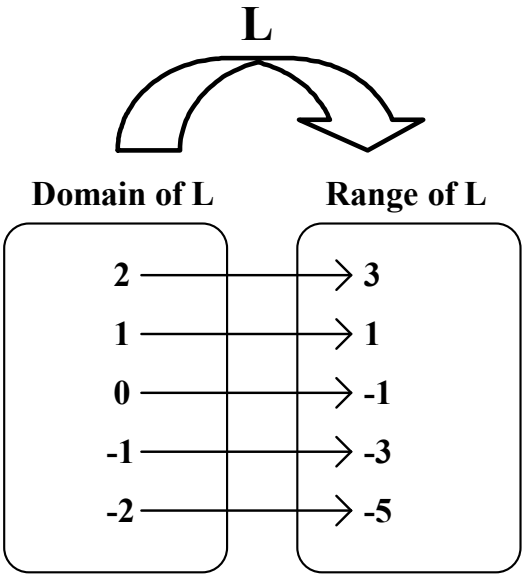
_____ **10. relation J**



_____ **11. relation K**



_____ **12. relation L**



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

13. f(-3) = _____ **14. f(0) = _____** **15. f(4) = _____**

16. g(-3) = _____ **17. g(0) = _____** **18. g(4) = _____**

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Given: Functions F = { (x,y) : y = x^3 + 1 } and G = { (x,y) : y = 2x – 1 }. Evaluate each of the following.

19. F(-2) = _____ **20. F(0) = _____** **21. F(5) = _____**

22. G(-2) = _____ **23. G(0) = _____** **24. G(5) = _____**

Given: Functions H and L defined by the equation H(x) = 4x and L(x) = x + 4. Evaluate each of the following.

25. H(-2) = _____ **26. H(0) = _____** **27. H(5) = _____**

28. L(-2) = _____ **29. L(0) = _____** **30. L(5) = _____**

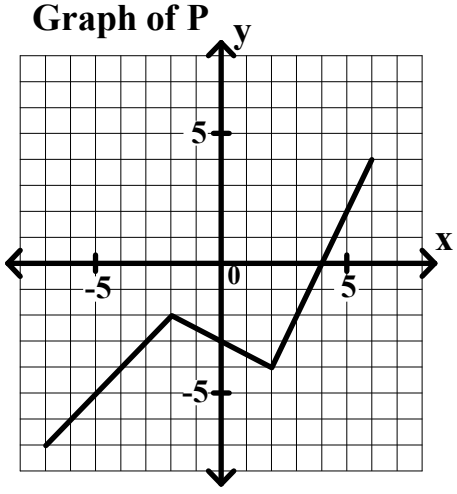
Given: Functions K and J defined by the equation K(x) = -3x – 2 and J(x) = 2x^3 + 1 Evaluate each of the following.

31. K(-3) = _____ **32. K(0) = _____** **33. K(4) = _____**

34. J(-3) = _____ **35. J(0) = _____** **36. J(4) = _____**

Given the function P defined by this graph.

Graph of P



37. What is the domain of P? _____

38. What is the range of P? _____

Evaluate each of the following.

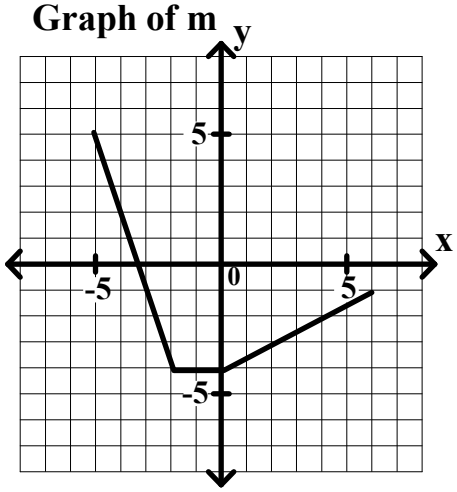
39. P(-3) = _____

40. P(0) = _____

41. P(4) = _____

Given the function m defined by this graph.

Graph of m



42. **What is the domain of m? _____**

43. **What is the range of m? _____**

Evaluate each of the following.

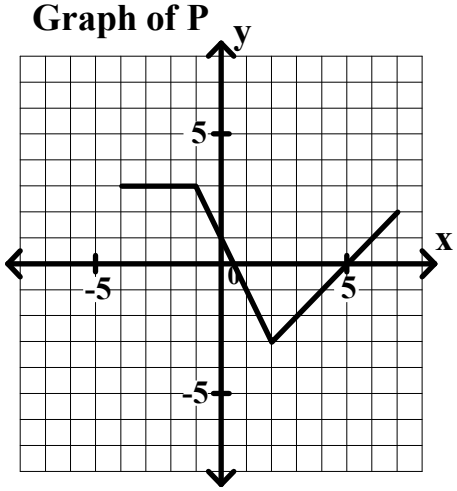
44. **m(-3) = _____**

45. **m(0) = _____**

46. **m(4) = _____**

Given the function P defined by this graph.

Graph of P



47. **What is the domain of P? _____**

48. **What is the range of P? _____**

Evaluate each of the following.

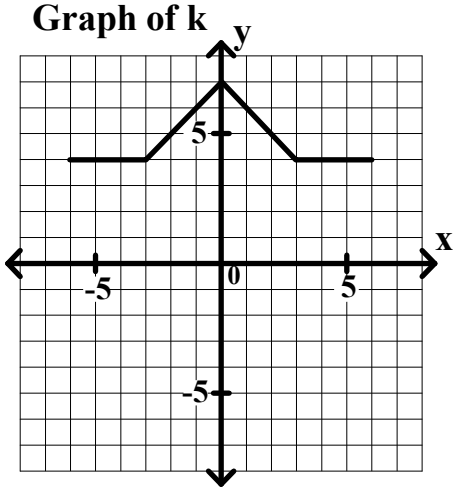
49. **P(-2) = _____**

50. **P(0) = _____**

51. **P(5) = _____**

Given the function k defined by this graph.

Graph of k



52. **What is the domain of k? _____**

53. **What is the range of k? _____**

Evaluate each of the following.

54. **k(-2) = _____**

55. **k(0) = _____**

56. **k(5) = _____**