**Common Core #11 Review Study Guide**

YES or NO. Is the relation a function? Explain your reasoning.

\_\_\_\_\_\_\_\_\_\_\_\_1. (-1,4)(-3,2)(2,6)(3,7) \_\_\_\_\_\_\_\_\_\_\_\_\_2. (1,4)(2,5)(3,6)(1,7)

\_\_\_\_\_\_\_\_\_\_\_\_3. \_\_\_\_\_\_\_\_\_\_\_\_\_4.

|  |  |
| --- | --- |
| x | y |
| -4 | 6 |
| -2 | 10 |
| 0 | 14 |
| 2 | 18 |
| 4 | 22 |

|  |  |
| --- | --- |
| x | y |
| 0 | -6 |
| 0 | -4 |
| 1 | -2 |
| 2 | 0 |
| 3 | 2 |

Make a table of x and y values for the following equations.

5. y = -3x + 1 6. y = 2x – 7

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

7. y = ½x – 3 8. y = 11x

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

|  |  |
| --- | --- |
| x | y |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

Are the ordered pairs below a solution for the following equation?

y = 2x – 5

9. (3, 1) 10. (-1, 7) 11. (-2, -9)

Are the ordered pairs below a solution for the following equation?

y = -4x + 3

12. (3, -7) 13. (1, 7) 14. (0, -3)

Orange-Aid Online Store sells oranges by the pound. Each pound of oranges ordered cost $7/lb plus $12 shipping and handling per order.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_15. Write a function rule for the total cost (y) for any number of pounds (x) bought.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16. How much would 10lbs of oranges cost?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_17. If you spent $100 on oranges, how many pounds could you buy?

18. Explain what the words domain and range mean. Give a specific example for each.

Below are three plans for renting the same size truck/van to make a one day move.

Danny’s Moving Vans Malaya’s Movers Goody’s Rental Trucks

$45 per day plus $.50 per mile $80 per day unlimited miles $30 per day plus $0.75 per mile

19. If you were moving 100 miles, which company would you choose? Explain your reasoning.

20. At what mileage point would Danny’s Moving Vans and Malaya’s Movers cost the same amount of money?

21. What is the price difference between Danny’s Moving Vans and Goody’s Rental Trucks for a 50 mile move?

22. If you needed to rent a moving truck/van for two days, what company would be the best choice? Explain.