**Dec 2 – Dec 6 Homework NWNC Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Monday 30 minutes of Compass \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Parent Signature**

**Tuesday 1-9 Wednesday 10-21 Study for Quiz tomorrow Thursday 22-27**

**Directions: Are the relations functions? If not, explain why.**

1. {(4, 7), (8, 11), (4, 9), (8, 13)}
2. {(-3, 0), (-2, 0), (-1, 0), (0, 0), (1, 1)}
3. {(6, 25), (12, 35), (18, 45), (24, 55)}
4. {(2, 4), (3, 5) (2, 6), (7, 9)}
5. The amount of bananas you buy at a store for $.85 per pound.
6. The amount of carrots that you buy at a store for $.29 per pound.
7. The steady price increase of a bus ticket over time.

**Directions: Answer each question about functions.**

1. Evaluate the function  when the domain is {-3, -1, 1, 3}.
2. Evaluate the function  when the domain is {-10, -5, 0, 5, 10}.
3. Evaluate the function  when the domain is {5, 6, 7, 8, 9}.
4. Evaluate the function  when the domain is {1, 2, 3, 4, 5}.

**Directions: Write function rules.**

1. Write a function rule for the following data.

| **x** | **f(x)** |
| --- | --- |
|  9 | 27 |
| 11 | 33 |
| 15 | 45 |
| 16 | 48 |

**Directions: Solve the following problem.**

1. Sandwich cost $3.45 each. Write a function rule for the cost, , for a number of sandwiches, .
2. Now, find the cost of 3, 6, and 9 sandwiches.

**Directions: Is the graph a function? Explain your reasoning.**

1. 17. 18.

  

20.

21.

19.

**Directions: Write the mathematical representation for each verbal expression.**

22. Three times a number increased by 8

23. Six times the difference of a number and 7

24. The product of two and a number is 142.

25. The quotient of the sum of a number and 8 and 5 is equal to 17.

26. The quotient of 13 and a number

27. Nine less than two times a number is twenty.