

Name _____

Date _____

Math 8R - _____

Chapter 7: Worksheet #3

- 1) A food bank distributes cans of vegetables every Saturday. They keep track of the cans in the following manner in the table. A linear function can be used to represent the data. The information in the table shows the function of time in weeks to the number of cans of vegetables distributed by the food bank.

Number of Weeks: (x)	1	12	20	45
Number of Cans of Vegetables Distributed: (y)	180	2,160	3,600	8,100

- Describe the function in terms of cans distributed and time.
- Write the equation or rule that represents the linear function that describes the number of cans handed out, y , in x weeks.
- Assume that the food bank wants to distribute 20,000 cans of vegetables. How long will it take them to meet that goal?
- Assume that the food bank has already handed out 35,000 cans of vegetables and continues to hand out cans at the same rate each week. Write a linear function that accounts for the number of cans already handed out.
- Using your function in part (d), determine how long in years it will take the food bank to hand out 80,000 cans of vegetables.

- 2) A linear function has the table of values below. The information in the table shows the function of time in hours to the distance an airplane travels in miles. Assume constant speed.

Number of hour traveled: (x)	2.5	4	4.2
Distance in miles: (y)	1,062.5	1700	1,785

- Describe the function in terms of distance and time.
- Write the rule that represents the linear function that describes the distance traveled in miles, y , in x hours.
- Assume that the airplane is making a trip from New York to Los Angeles which is approximately 2,475 miles. How long will it take the airplane to get to Los Angeles?
- The airplane flies for 8 hours. How many miles will it be able to travel in that time interval?

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- 3) A particular linear function has the table of values below.

Input: (x)	2	3	8	11	15	20	23
Output: (y)	7	10		34		61	

- What is the equation that describes the function?
- Complete the table using the rule.