# Algebra I NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ch. 1 Test Practice DATE:\_\_\_\_\_\_\_\_\_\_\_\_ HOUR:\_\_\_\_

Buddy is ordering flour for his bakery. Baker’s Supply charges $0.30 per pound plus a $10 delivery fee. Flour Depot charges $0.80 per pound with free delivery.

1. Write an equation to model the cost of flour from Baker’s Supply.

2. Write an equation to model the cost of flour from Flour Depot.

3. Define the variables in your equations.

4. Which quantity is the independent variable?

5. Which quantity is the dependent variable?

Complete the table to analyze the cost of ordering flour from the 2 companies.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Pounds of Flour | Baker’s Supply | FlourDepot |
| Unit |  |  |  |
| Expression |  |  |  |
|  | 0 |  |  |
|  | 5 |  |  |
|  | 10 |  |  |
|  | 15 |  |  |
|  | 20 |  |  |
|  | 25 |  |  |
|  | 30 |  |  |

6. For how many pounds of flour is the cost from the two companies the same?

7. Complete the graph below. Select an appropriate scale for the table data.

|  |  |  |  |
| --- | --- | --- | --- |
| Variable Quantity | Lower Bound | Upper Bound | Interval |
| Pounds of flour |  |  |  |
| Total Cost |  |  |  |

 Title:

8. Label each of your lines and the point of intersection.

For each day last week, Buddy ordered 12, 18, 20, 16 and 14 pounds of flour.

9. What is the average number of pounds of flour he orders each day? Show your work.

10. If Buddy orders the average amount of flour each day, from which company should he order? Explain your reasoning and answer in a complete sentence.

11. If Buddy decides to order his flour for all five days only once a week, from which company should he order? Explain your reasoning and answer is a complete sentence.