Name: \_\_\_\_\_

Date: \_\_\_\_\_

A bakery makes small batches of bread daily. Each day, the bakery records the amount of flour used and the number of loaves of bread made. All loaves are approximately the same size. The table and graph show the bakery's data for five days.

Flour (pounds)	Loaves of Bread
35	49
45	60
27	39
60	85
56	79



- Write an equation that can be used to model the number of loaves of bread, y, that can be made from x pounds of flour.
- Use your equation to predict the number of loaves that could be made from 85 pounds of flour.
- Show your work or explain your answer.

Enter your equation, your answer, and your work or explanation in the space provided.



## ANSWER KEY

Rubric		
Score	Description	
3	Student response includes the following 3 elements.	
	<ul> <li>Modeling component = 1 point         <ul> <li>The student writes a correct equation of the line using a reasonable constant of proportionality.</li> </ul> </li> </ul>	
	<ul> <li>Computation component = 1 point         <ul> <li>The student provides the correct prediction of loaves that can be made using his or her equation</li> </ul> </li> </ul>	
	<ul> <li>Modeling component = 1 point         <ul> <li>The student provides a valid explanation or work.</li> </ul> </li> </ul>	
	Sample Student Response The slope of the line would be the constant of proportionality for the line shown. The point (35, 49) is really close the line which would make the constant of proportionality $49/35 = 7/5$ . The equation of the line would be $y = 7/5x$ . The number of loaves of bread from 85 pounds of flour would be 7/5(85) = 119 loaves.	
	(Student could use one of the other points that is close to the line or use the slope formula to find the slope, m. The prediction can then be taken from the equation written.) A correct linear equation in any form is acceptable.	
2	Student response includes 2 of the above elements.	
1	Student response includes 1 of the above elements.	
0	Student response is incorrect or irrelevant.	

Glow	Grow