

POINT-SLOPE FORM HOMEWORK

NAME \_\_\_\_\_

Write an equation in POINT-SLOPE form and SLOPE-INTERCEPT form for a line, given its slope and one point that it passes through.

1. Slope = 3 ; point ( - 2 , 5 )

2. Slope = -5 ; point ( 1 , - 4 )

3. The table shows postal rates for first class US mail in the year 2004.

a. Make a scatter plot on your calculator of the data. Describe any patterns you notice.

b. Find the slope of the line between any two points in the data. What is the real-world meaning of the slope?

c. Write a linear equation in POINT-SLOPE form that models that data. Graph the equation to check that it fits your data points.

d. Use the equation you wrote in Part c to find the cost of mailing a 10oz letter.

POSTAL RATES	
Weight not Exceeding (oz) x	Cost y
1	0.37
2	0.60
3	0.83
4	1.06
5	1.29

e. What would be the cost of mailing a 3.5 oz letter? A 9.1 oz letter?

f. The equation you found in Part c is useful for modeling this situation. Is the graph of this equation, a continuous line, a correct model for this situation? Why or why not?