

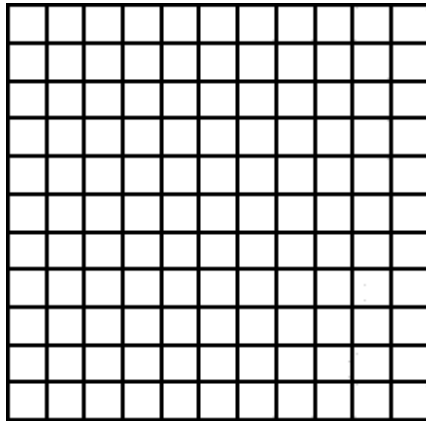
**Unit 6: Data Analysis**  
**Lesson: Line of Best Fit**

Name \_\_\_\_\_

Make a scatter plot for each set of data. Eyeball the line of best fit and use a rule to draw it on your scatter plot. Then write the equation of the line of best fit. Use this equation to answer each question.

1. A student who waits on tables at a restaurant recorded the cost of meals and the tip left by single diners.

Meal Cost	\$4.75	\$6.84	\$12.52	\$20.42	\$8.97
Tip	\$0.50	\$0.90	\$1.50	\$3.00	\$1.00



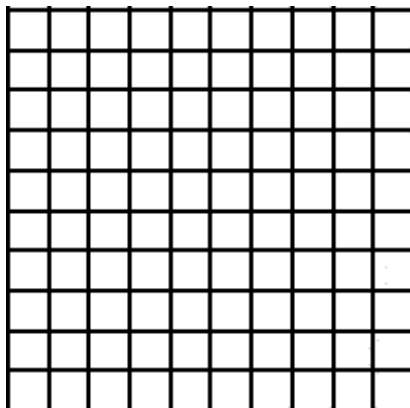
Line of Best Fit Equation: \_\_\_\_\_

If the diner orders a meal costing \$10.50, how much tip should the waiter expect to receive? (Show all work!)

Expected Tip: \_\_\_\_\_

2. The table below gives the number of hours spent studying for a science exam ( $x$ ) and the final exam grade ( $y$ ).

$x$	2	5	1	0	4	2	3
$y$	77	92	70	63	90	75	84



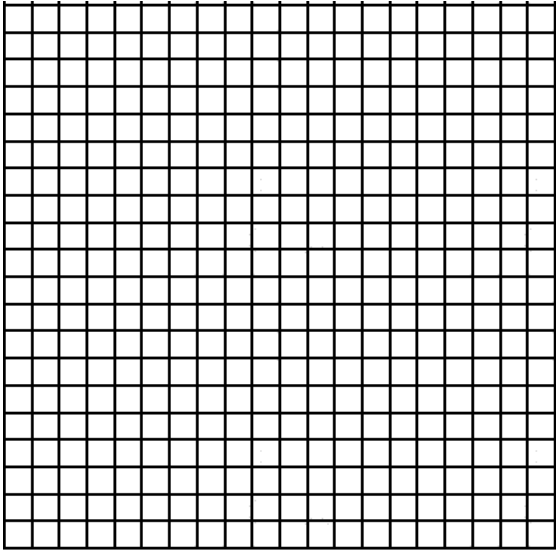
Line of Best Fit Equation: \_\_\_\_\_

Predict the exam grade of a student who studied for 6 hours. (Show all work!)

Expected Grade: \_\_\_\_\_

3. The table below shows the lengths and corresponding ideal weights of sand sharks.

Length	60	62	64	66	68	70	72
Weight	105	114	124	131	139	149	158



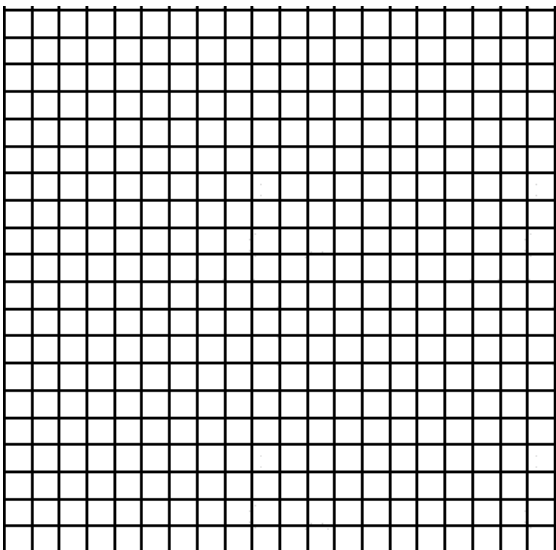
Line of Best Fit Equation: \_\_\_\_\_

Predict the weight of a sand shark whose length is 75 inches.  
(Show all work!)

Expected Weight: \_\_\_\_\_

4. The table below gives the height and shoe sizes of six randomly selected men.

Height	67	70	73.5	75	78	66
Shoe size	8.5	9.5	11	12	13	8



Line of Best Fit Equation: \_\_\_\_\_

If a man has a shoe size of 10.5, what would be his predicted height? (Show all work!)

Expected Height: \_\_\_\_\_