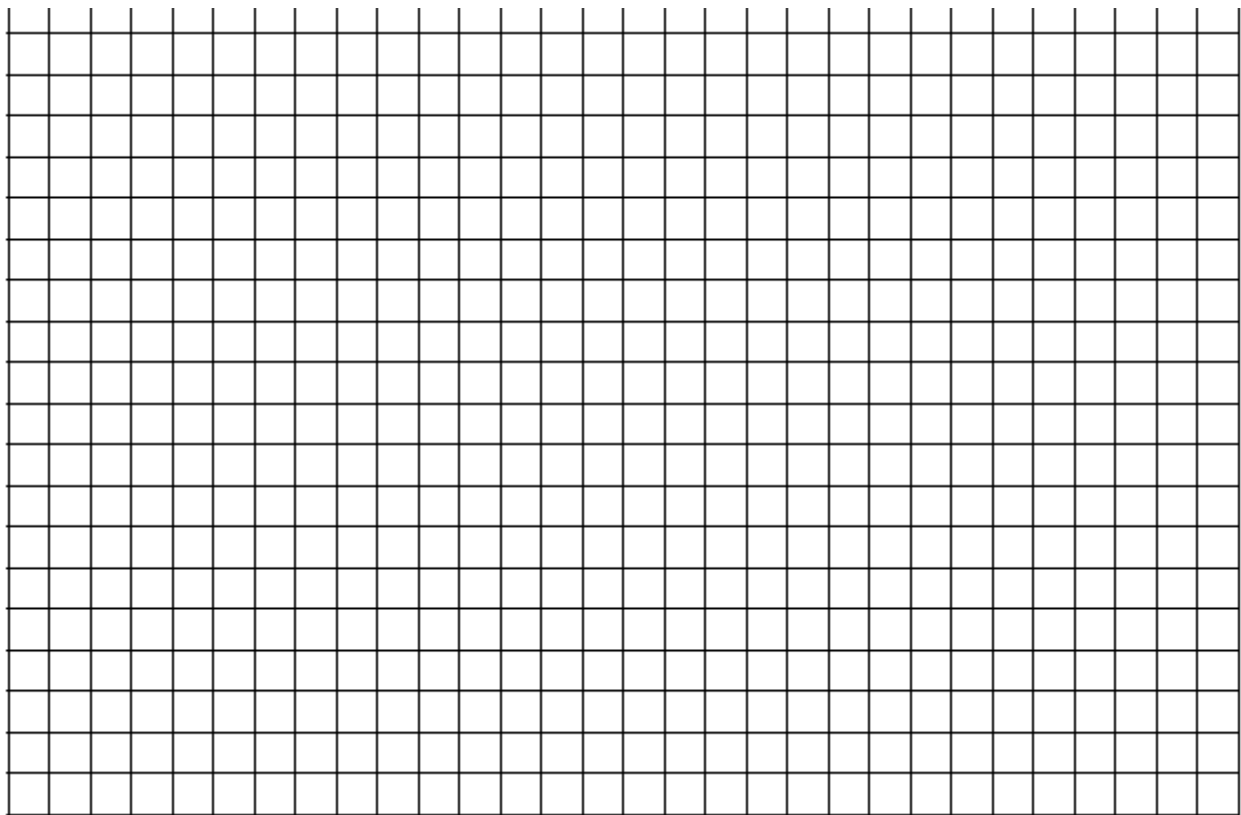Name _____ Units _____

Graphing Practice

For each of the following, follow checklist to create graph, list the independent variable and the dependent variable, make a prediction based on the line you drew, and explain the relationship between the two variables (what conclusion can you make from the graph?).

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

How does the cost of the meal affect the total amount single people tip the waitress?	
Meal Cost (in dollars)	**Tip (in dollars)**
$4.00	$0.50
$6.50	$0.90
$9.00	$1.00
$12.50	$1.50
$20.00	$3.00

Check off the boxes as you complete them…

☐ Put a title on the graph
☐ Label your x-axis with a title/measurement
☐ Label your y-axis with a title/measurement
☐ Evenly distribute the appropriate numbers along the X axis and Y axis
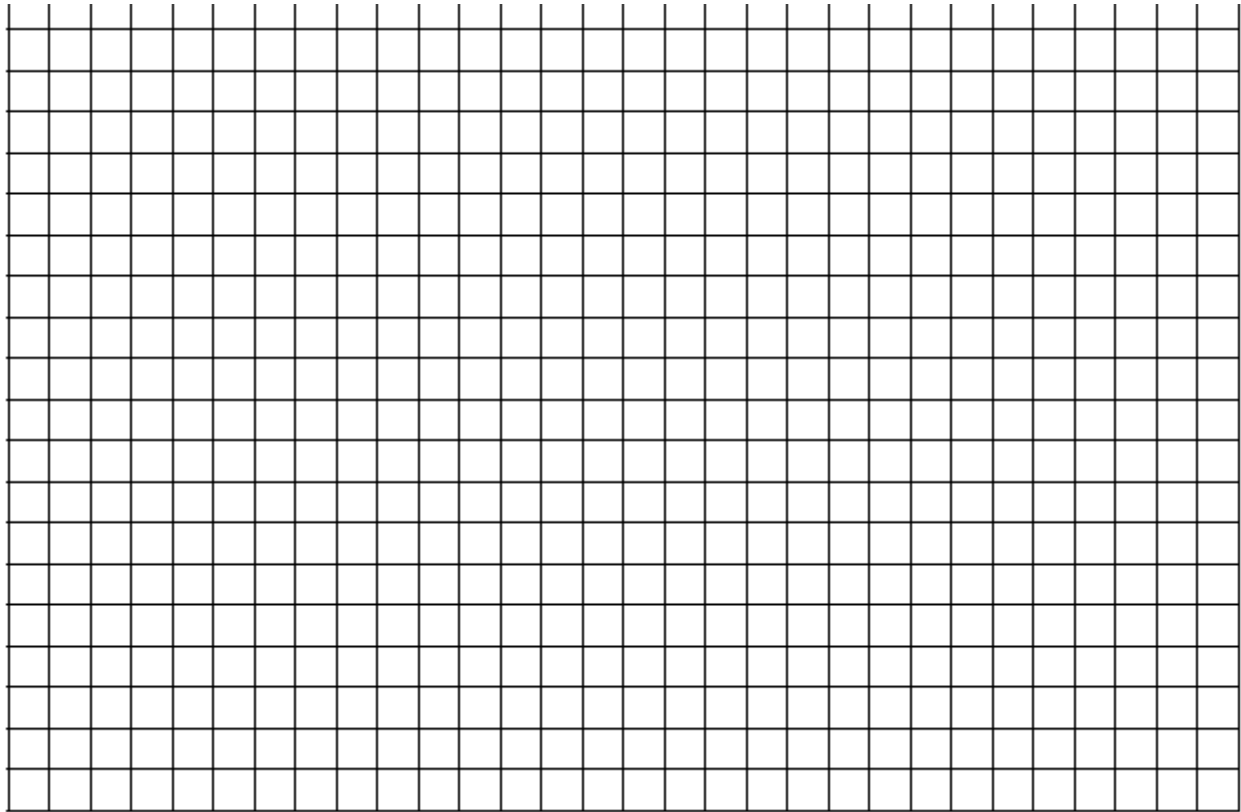☐ Plot the points from the data chart
☐ Draw a best fit line

Independent variable _____   Dependent variable _____

What tip amount would you expect if you paid $10.50 for dinner?   Tip expected _____

As the amount you spend on dinner increases, what happens to the tip? The tip will _____

2. The table below gives the number of hours spent studying for a science exam and the final exam grade

How does the total hours spent studying affect your final exam grade?	
Time Spent Studying (in hours)	Total Exam Score (out of 10 points)
2	5
5	7
1	4
0	3
4	6
7	8.5
3	5.5

Check off the boxes as you complete them…
- ☐ Put a title on the graph
- ☐ Label your x-axis with a title/measurement
- ☐ Label your y-axis with a title/measurement
- ☐ Evenly distribute the appropriate numbers along the X axis and Y axis
- ☐ Plot the points from the data chart
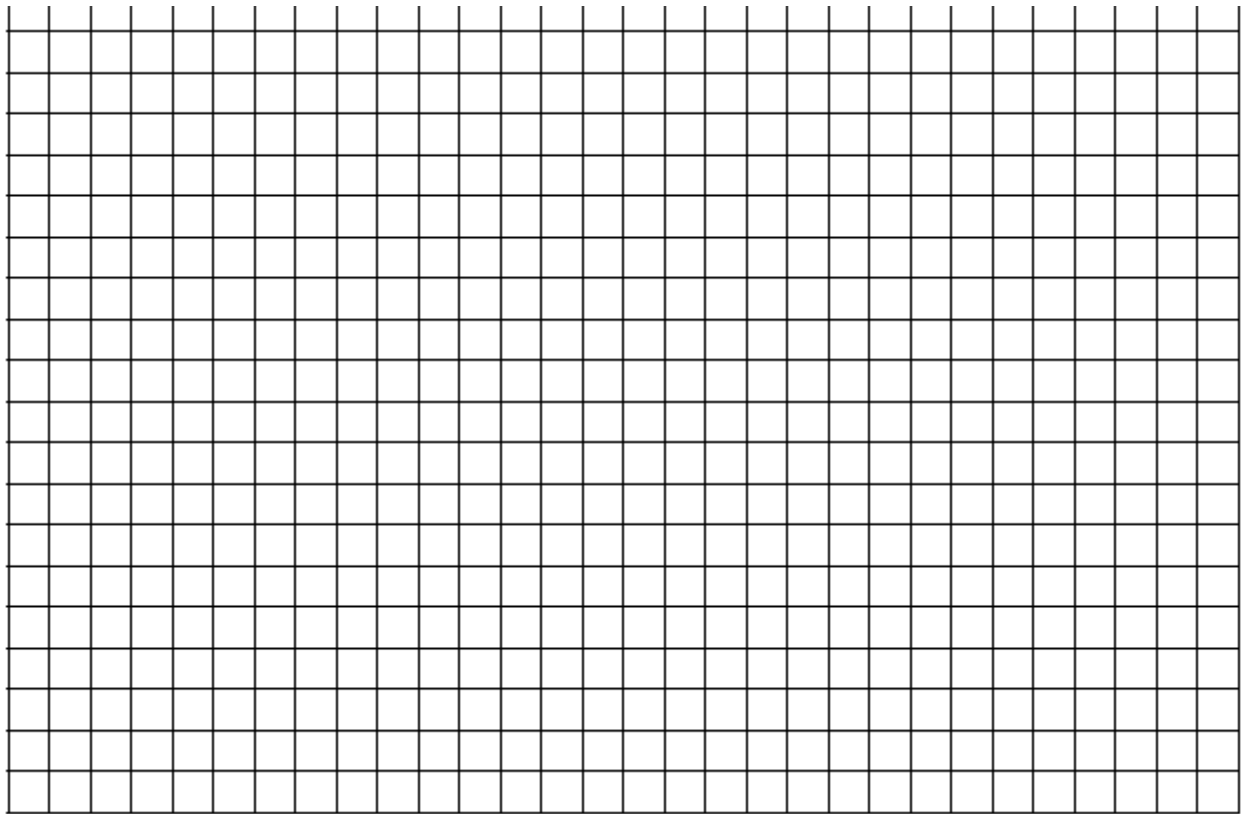- ☐ Draw a best fit line

Independent variable _____   Dependent variable _____

What grade would you expect if you spent 8 hours studying?   Grade expected _____

As the amount you study increases, what happens to the grade? The grade will _____

3. The table below shows how much you feed the sharks and corresponding weights of sand sharks.

How does the amount you feed sharks affect the weight of sand sharks?	
Amount you Feed the Sharks (in Kilograms)	Total Weight of Sand Sharks (in Kilograms)
60	70
62	60
64	55
66	68
68	90
70	80
72	50

Check off the boxes as you complete them…
- ☐ Put a title on the graph
- ☐ Label your x-axis with a title/measurement
- ☐ Label your y-axis with a title/measurement
- ☐ Evenly distribute the appropriate numbers along the X axis and Y axis
- ☐ Plot the points from the data chart
- ☐ Draw a best fit line

Independent variable _____   Dependent variable _____

What weight of shark would you expect if you fed the shark 55 kg of food?   Weight expected? _____

What relationship (conclusion) can you make from the data chart/graph? _____