

Topics: Histograms, Cumulative Histograms, Scatterplots

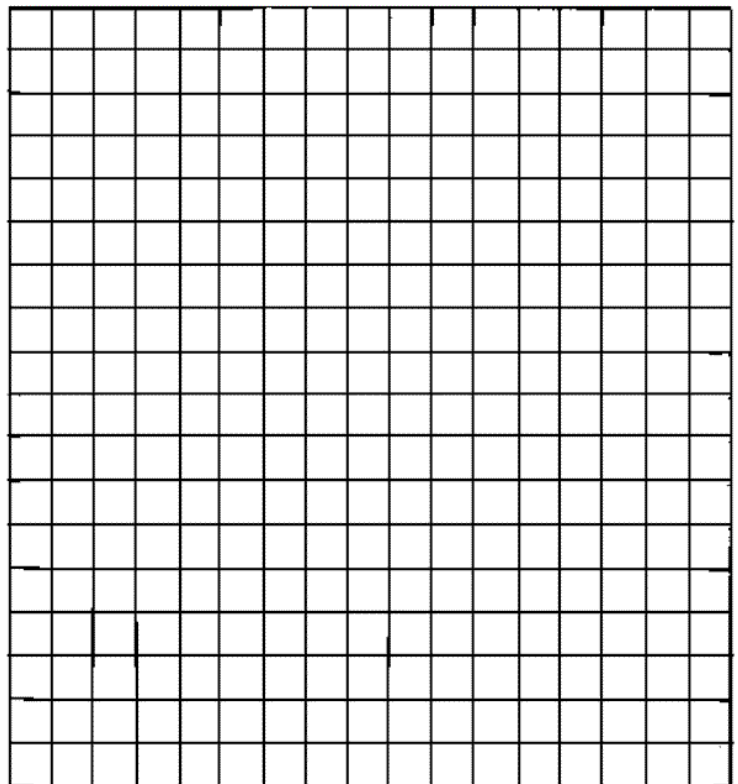
Things to remember when graphing:

1. _____
2. _____
3. _____
4. _____

Problems:

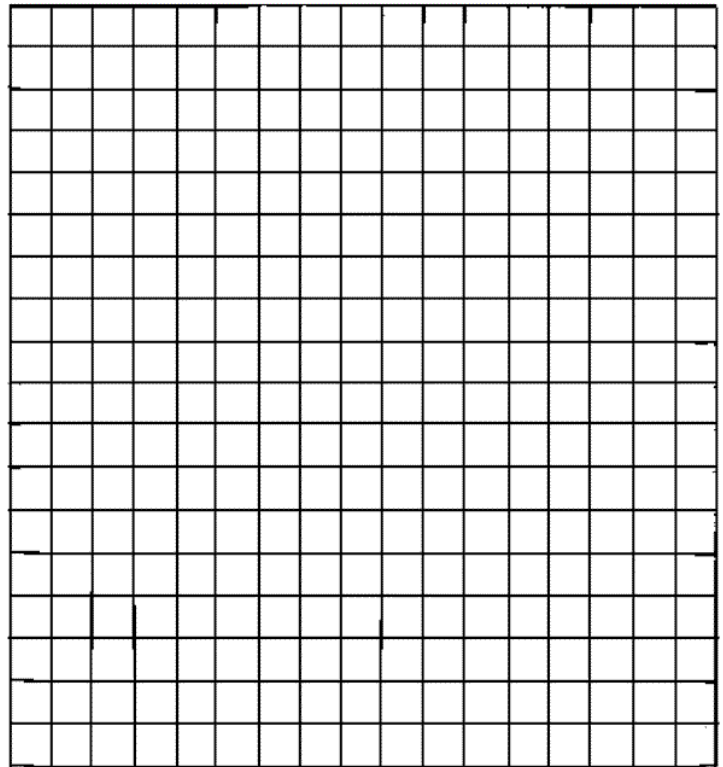
1. Students were asked what their favorite sport was. Look at the table of the data below and construct a histogram. Don't forget to choose an appropriate scale, label your axis and title your graph.

SPORT	NUMBER OF STUDENTS
Football	17
Baseball	15
Basketball	21
Soccer	12
Golf	6



2. Here is the data table for the shoe size data we have been working with. Add a cumulative frequency column to the table and make a cumulative frequency histogram of the data.

SHOE SIZE	NUMBER OF STUDENTS	CUMMULATIVE FREQUENCY
5-6	5	
7-8	8	
9-10	6	
11-12	6	



3. Look at the following data table and answer the questions.

- a. How many runners participated in the race?
- b. How many runners finished the race in less than 53 seconds?
- c. What was the time interval with the most runners?
- d. What was the time interval with the least number of intervals?

400-Meter Run	
Time (sec)	Frequency
50.0–50.9	
51.0–51.9	
52.0–52.9	
53.0–53.9	
54.0–54.9	

4. The following is data about baby tigers. It tracks the average weight (in lbs) of 3 baby tiger cubs, weekly, as they grow.

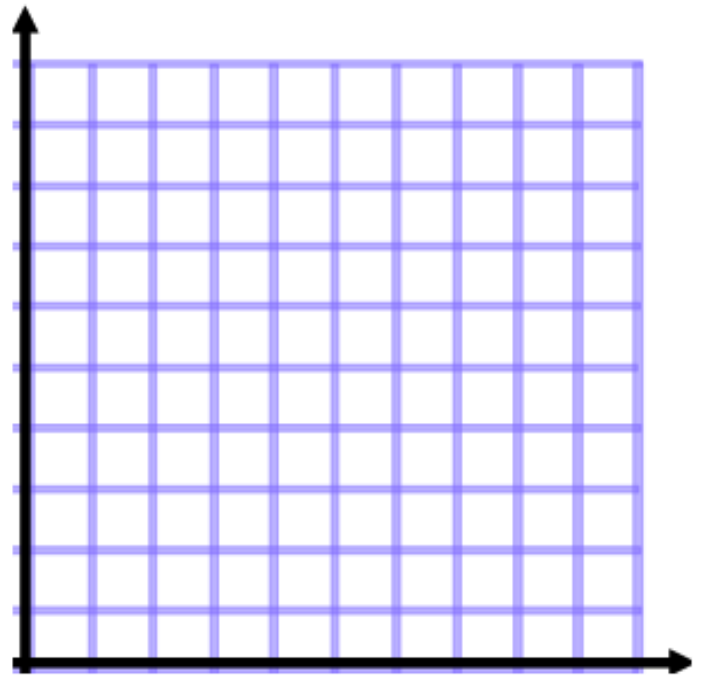
Weeks Old	0	1	2	3	4	5	6	7
Average Weight	2.2	3.9	4.4	5.6	7.1	8.3	10.0	12.4

a. Make a scatter plot of the data to the right:

b. Draw in a line of best fit on your scatterplot. What is the correlation of the data?

c. According to your line, how much would a tiger that was $4\frac{1}{2}$ weeks old weigh?

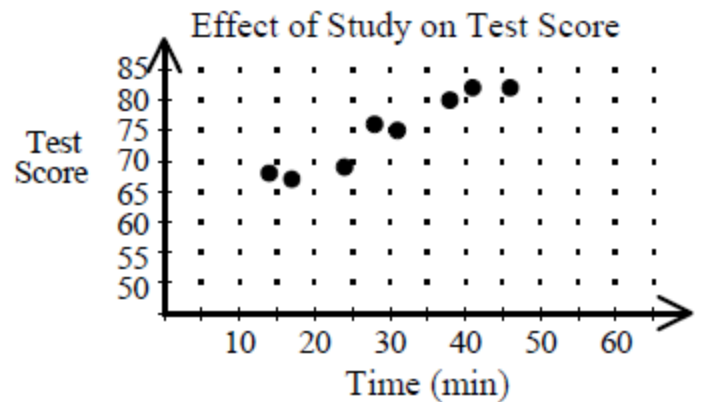
d. According to your line, how much would a tiger that was 8 weeks old weigh?



5. Look at the graph to the right:

a. What is the correlation of the graph?

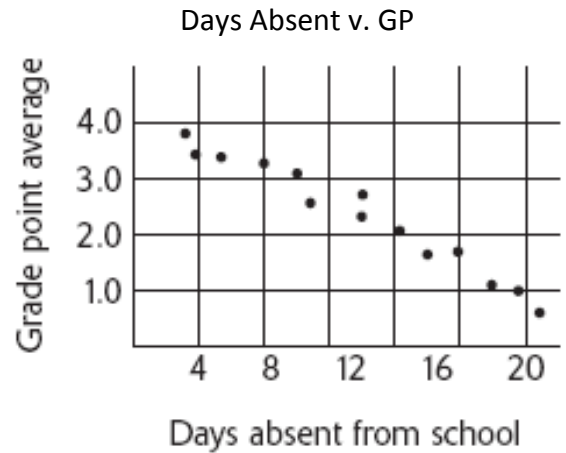
b. Draw in a line of best fit.



c. Find the equation of the line of best fit.

6. Look at the graph to the right and answer the questions.

- What is the independent variable?
- Does the graph represent univariate or bivariate data?
- Draw in a line of best fit.
- What type of graph is it?
- What kind of correlation does the data have?



- Using your line of best fit, if you were absent from school for 6 days, what 'would you GPA be?

7. Look at the data in the chart. relationship you may see.

Hours of TV watched per week	Grade Average
12	85
21	71
20	65
10	80
12	83
17	78
20	70

Create a scatterplot of the data and describe any

