

Warmup 4/(Five)

*****MAKE SURE YOU HAVE A WHITEBOARD, MARKER, ERASER*****

1. What type of correlation would you expect? Why? **# of miles between your town and the equator and the average yearly temperature of that town**

Negative Correlation

2. Fill in this frequency table according to the information: **“As people entered the theater, Aaron counted how many of the 105 people had popcorn and how many had a drink. He found that out of 84 people that had popcorn, only 10 did not have a drink. Six people walked in without popcorn or a drink.”**

	Popcorn	No Popcorn
Drink	74	15
No Drink	10	6

- Use the data in the table to answer the following question: In this sample, is there an association between gender and “handedness”?

	Left-Handed	Right-Handed	Total
Male	10	50	
Female	6	30	
Total			

About 17% of males are left-handed

About 17% of females are left handed

NO ASSOCIATION

Back to your guided notes!!!



	Spanish	French	German	Total
Boys	10	2	8	20
Girls	15	12	3	30
Total	25	14	11	50

1. What percent of the students are girls who take French?
 $\frac{12}{50} = 24\%$
2. What percent of the students who take Spanish are boys?
 $\frac{10}{25} = 40\%$
3. What percent of the students take German?
 $\frac{11}{50} = 22\%$
4. What percent of the girls do not take German?
 $\frac{27}{30} = 90\%$

	Spanish	French	German	Total
Boys	10	2	8	20
Girls	15	12	3	30
Total	25	14	11	50

- In this sample, is there an association between gender and whether or not the student takes French?

Boys: $\frac{2}{20} = 10\%$

10% of the boys took French, but 40% of the girls took French. So girls were more likely to take French.

Girls: $\frac{12}{30} = 40\%$

- Is there an association between gender and whether or not the student takes Spanish?

Boys: $\frac{10}{20} = 50\%$

Girls: $\frac{15}{30} = 50\%$

Half of the boys took Spanish, and half of the girls took Spanish. Both genders were equally likely to take Spanish.

The manager of a store selling sports equipment conducted a survey. She asked 145 girls if they had ever been fishing and if they had ever been skiing. There are 46 girls who said they had been fishing, and of those 16 have been skiing too. Of all those surveyed 70 said they had been skiing.

		Fishing	
		Yes	No
Skiing	Yes	16	54
	No	30	45

Rounded to the nearest whole number, what is the percent of girls surveyed who had never been fishing?

68

Rounded to the nearest whole number, what is the percent of girls surveyed who had never been skiing?

52

Quiz Monday

- Predicting Positive vs. Negative vs. No Correlation
- Choosing the best line of best fit
- Finding the equation of a line of best fit (finding slope & y-intercept)
- Interpreting what the slope & y-intercept mean in context
- Finding percentages from frequency tables
- Knowing if there is an association between the two variables in a frequency table
- Filling in a frequency table based on given information

Classwork/Homework

- Scatter Plots & Frequency Tables Review Worksheet
- **You must check the answers on my website!!! This is part of the grade!!!**