

## Part A: Categorical Data &amp; Two-Way Tables [8.SP.4]

1. Two teachers surveyed their students on whether they would prefer Pizza or Ice Cream during their class trip.

	Mr. Smith's Class	Mrs. Jones' Class	Total
Prefer Pizza	12	20	
Prefer Ice Cream	18	16	
Total			

**Determine...**

- A) ...how many students surveyed prefer ice cream. \_\_\_\_\_
- B) ...how many students were surveyed from Mrs. Jones' class. \_\_\_\_\_
- C) ...the percent of students surveyed that prefer ice cream. \_\_\_\_\_
- D) ...the percent of students surveyed from Mr. Smith's class preferring pizza. \_\_\_\_\_

2. **Convert** the two-way table from question 1 into a column-relative frequency table.

	Mr. Smith's Class	Mrs. Jones' Class	Total
Prefer Pizza			
Prefer Ice Cream			
Total			

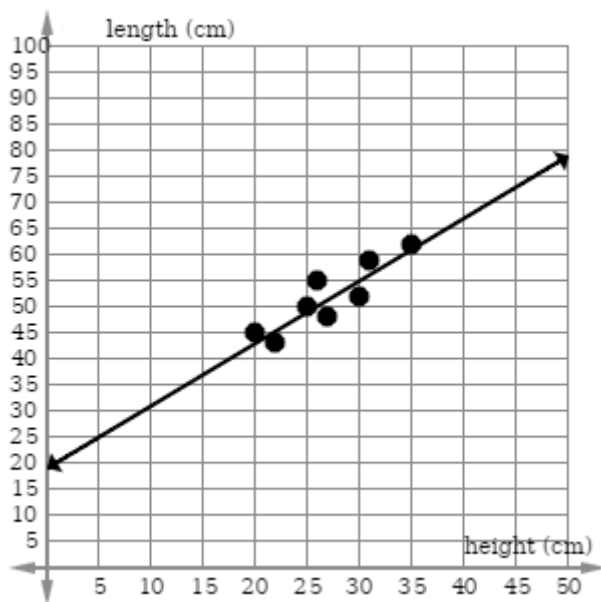
3. **Determine** if there is an association between class and food preference using the column-relative frequency table above. **Justify** your reasoning.

Part B: Quantitative Data & Scatter Plots [8.SP.1]

4. The scatter plot shows the relationship between the height and length of several golden retrievers.

A) **Describe** the relationship between height and length.

B) **Determine** the approximate intercept of the line of best fit as a point  $(0, b)$ .



C) **Determine** the approximate slope of the line of best fit.

5. **Plot** at least ten points on each graph below to fit the indicated description.

Negative Correlation	No Correlation	Positive Correlation