



## Two-Way Frequency Tables

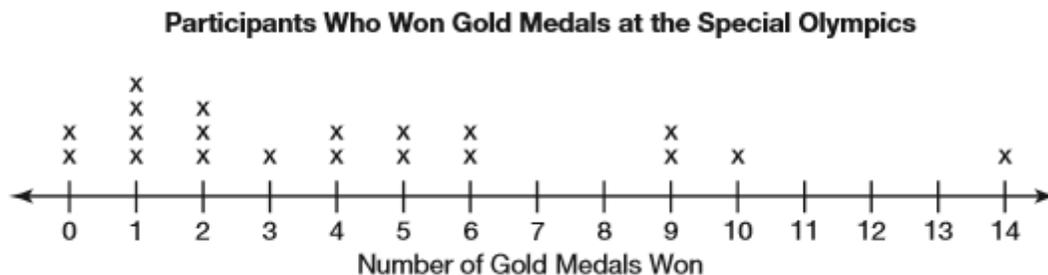
3) The table below shows the favorite colors of 30 students.

		Favorite Colors				Total
		Blue	Red	Yellow	Green	
Gender	Girls	7	2	4	3	16
	Boys	2	8	3	1	14
	Total	9	10	7	4	30

- Create a relative frequency table for the given data.
- How many students prefer red?
- How many boys prefer blue?
- What percent of the students are girls?
- What percent of the girls prefer yellow?
- What percent of boys prefer green?

## Dot Plots

4) Use the dot plot below to answer questions about the number of participants who won gold medals at the Special Olympics.



- How many participants are represented in the dot plot?
- What is the mean number of gold medals won?
- Find the 5 number summary.
- How many participants won 10 or more medals?
- Would you expect the mean or median to be greater in this data set? Why?

## Histograms

5) Students answers a survey question about how long it takes them to get ready in the morning.



a. How many students answered the question?

b. How many students take less than 40 minutes to get ready?

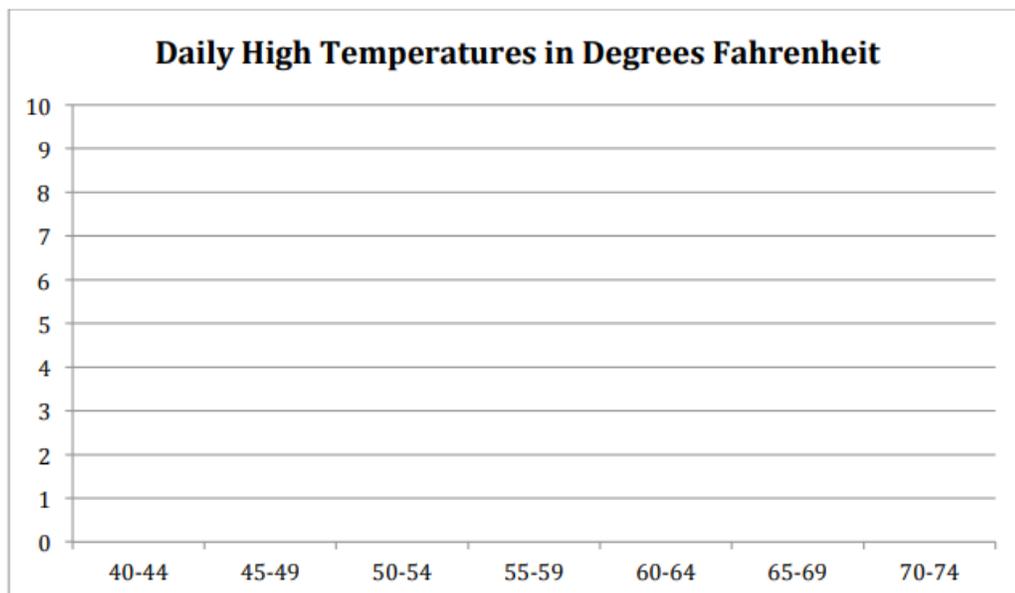
c. What percent of surveyed students take longer than an hour to get ready?

6) Create a histogram using the data below.

Daily high temperature in degree Fahrenheit

63 70 64 71 70 62 68 67 72 65 62 59 58 60 59 53 51 55 56 50 53 57 55 50 46 49 46 52 58

Interval	# of values
40-44	
45-49	
50-54	
55-59	
60-64	
65-69	
70-74	



## Line of Best Fit

7) A student who waits tables at a restaurant recorded the cost of the meals and the tips they received.

- Based on your scatter plot, does this data appear to have a positive or negative correlation?
- Using a ruler, draw the "line of best fit" for the data you plotted.
- Determine the slope of your line-of-best-fit. Show your calculations.

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

- Give the Slope-Intercept form equation of your line of best fit.
- Based on the **graph of your line**, if somebody orders a meal costing \$11.00, how much of a tip should the waiter expect to receive?
- Based on the **equation from part e**, what would the waiter expect to make if the meal cost \$35.00?

