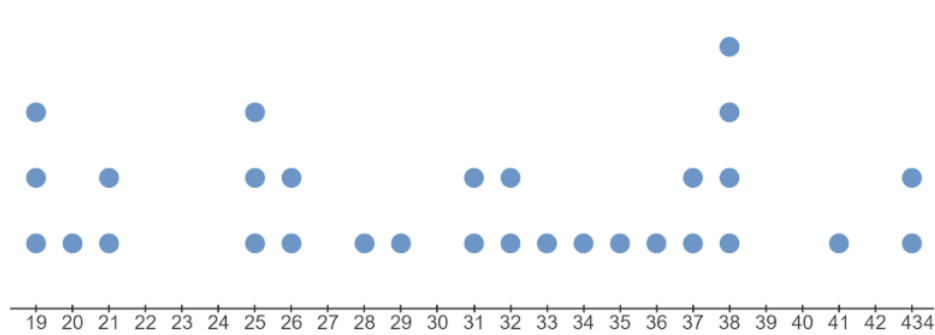


2.1.1: Exercises

- Given is a dot plot of MPG rating for 30 randomly selected cars.



Images are created with the graphing calculator, used with permission from Desmos Studio PBC.

- What does a dot on the dot plot represent?
- What is the most frequent MPG?
- How many vehicles have an MPG less than 25?
- What is the proportion of vehicles that have a MPG that is more than 35? Round to three decimal places.

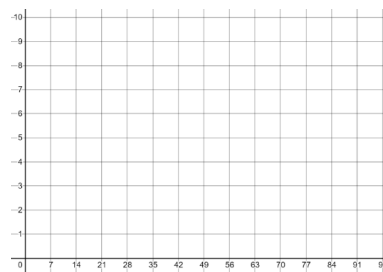
2. Given is the average life expectancy at birth of women from 20 randomly selected countries:

$$W = [78, 79, 49, 77, 51, 55, 71, 56, 62, 69, 70, 76, 77, 80, 90, 81, 82, 83, 56, 84]$$

a. Complete the table below.

Bin	Tally	Frequency	Relative Frequency		
			Fraction	Decimal	Percent
42-48					
49-55					
56-62					
63-69					
70-76					
77-83					
84-90					
Total					

b. Create a frequency histogram for the average life expectancy at birth of women. Label the axes.



Images are created with the graphing calculator, used with permission from Desmos Studio PBC.

c. In how many countries is the average life expectancy at birth for women at least 77?

d. Explain in words the meaning of the height of the third bar in the histogram.

e. Describe the center, shape, and spread of the histogram.

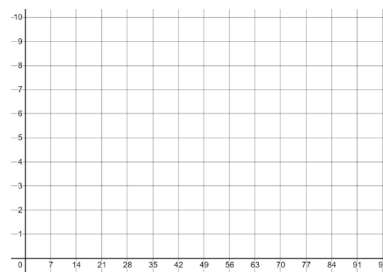
3. Given is the average life expectancy at birth of men from 20 randomly selected countries:

$$M = [89, 56, 76, 49, 77, 49, 55, 62, 62, 63, 76, 78, 79, 90, 80, 83, 81, 84, 90, 82]$$

a. Complete the table below.

Bin	Tally	Frequency	Relative Frequency		
			Fraction	Decimal	Percent
42-48					
49-55					
56-62					
63-69					
70-76					
77-83					
84-90					
Total					

b. Create a frequency histogram for the average life expectancy at birth of men. Label the axes.



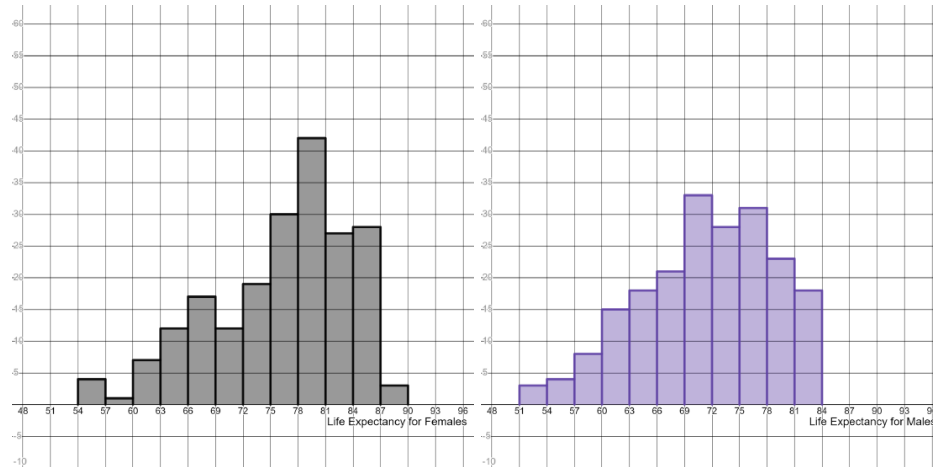
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c. In how many countries is the average life expectancy at birth for men at least 77?

d. Explain in words the meaning of the height of the fifth bar in the histogram.

e. Describe the center, shape, and spread of the histogram.

4. Given below are histograms for life expectancy for 202 countries for women and men. Compare the center, shape, and spread of the histograms.



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