

Lesson 2 Practice Problems

1. In hockey, a player gets credited with a “point” in their statistics when they get an assist or goal. The table shows the number of assists and number of points for 15 hockey players after a season.

assists	points
22	28
16	18
46	72
19	29
13	26
9	13
16	22
8	18
12	13
12	17
37	50
7	12
17	34
27	58
18	34

Make a scatter plot of this data. Make sure to scale and label the axes.

2. Select **all** the representations that are appropriate for comparing bite strength to weight for different carnivores.
- A. Histogram
 - B. Scatter plot
 - C. Dot plot
 - D. Table
 - E. Box plot
3. When is it better to use a table? When is it better to use a scatter plot?
4. There are many cylinders with radius 6 meters. Let h represent the height in meters and V represent the volume in cubic meters.
- a. Write an equation that represents the volume V as a function of the height h .
 - b. Sketch the graph of the function, using 3.14 as an approximation for π .
 - c. If you double the height of a cylinder, what happens to the volume? Explain this using the equation.
 - d. If you multiply the height of a cylinder by $\frac{1}{3}$, what happens to the volume? Explain this using the graph.

(From Unit 5, Lesson 17.)