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



© CC BY Open Up Resources. Adaptations CC BY IM.