### Lesson 17 Practice Problems

1. Here is data on the number of cases of whooping cough from 1939 to 1955.

| * year
 | * number of cases
 |
| --- | --- |
| * 1941
 | * 222,202
 |
| * 1950
 | * 120,718
 |
| * 1945
 | * 133,792
 |
| * 1942
 | * 191,383
 |
| * 1953
 | * 37,129
 |
| * 1939
 | * 103,188
 |
| * 1951
 | * 68,687
 |
| * 1948
 | * 74,715
 |
| * 1955
 | * 62,786
 |
| * 1952
 | * 45,030
 |
| * 1940
 | * 183,866
 |
| * 1954
 | * 60,866
 |
| * 1944
 | * 109,873
 |
| * 1946
 | * 109,860
 |
| * 1943
 | * 191,890
 |
| * 1949
 | * 69,479
 |
| * 1947
 | * 156,517
 |

* 1. Make a new table that orders the data by year.
	2. Circle the years in your table that had fewer than 100,000 cases of whooping cough.
	3. Based on this data, would you expect 1956 to have closer to 50,000 cases or closer to 100,000 cases?
1. In volleyball statistics, a block is recorded when a player deflects the ball hit from the opposing team. Additionally, scorekeepers often keep track of the average number of blocks a player records in a game. Here is part of a table that records the number of blocks and blocks per game for each player in a women’s volleyball tournament. A scatter plot that goes with the table follows.

| * blocks
 | * blocks per game
 |
| --- | --- |
| * 13
 | * 1.18
 |
| * 1
 | * 0.17
 |
| * 5
 | * 0.42
 |
| * 0
 | * 0
 |
| * 0
 | * 0
 |
| * 7
 | * 0.64
 |

* 
* Label the axes of the scatter plot with the necessary information.
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.



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