

Lesson 17 Practice Problems

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

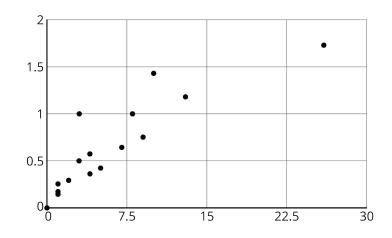
| year | number of cases |
|------|--------------------|
| 1941 | 222,202 |
| 1950 | 120,718 |
| 1945 | 133,792 |
| 1942 | 191,383 |
| 1953 | 37,129 |
| 1939 | 103,188 |
| 1951 | 68,687 |
| 1948 | 74,715 |
| 1955 | 62,786 |
| 1952 | 45,030 |
| 1940 | 183,866 |
| 1954 | 60,866 |
| 1944 | 109,873 |
| 1946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

- a. Make a new table that orders the data by year.
- b. Circle the years in your table that had fewer than 100,000 cases of whooping cough.
- c. Based on this data, would you expect 1956 to have closer to 50,000 cases or closer to 100,000 cases?



2. 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.



3. 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.