Name: _____

LINE GRAPH

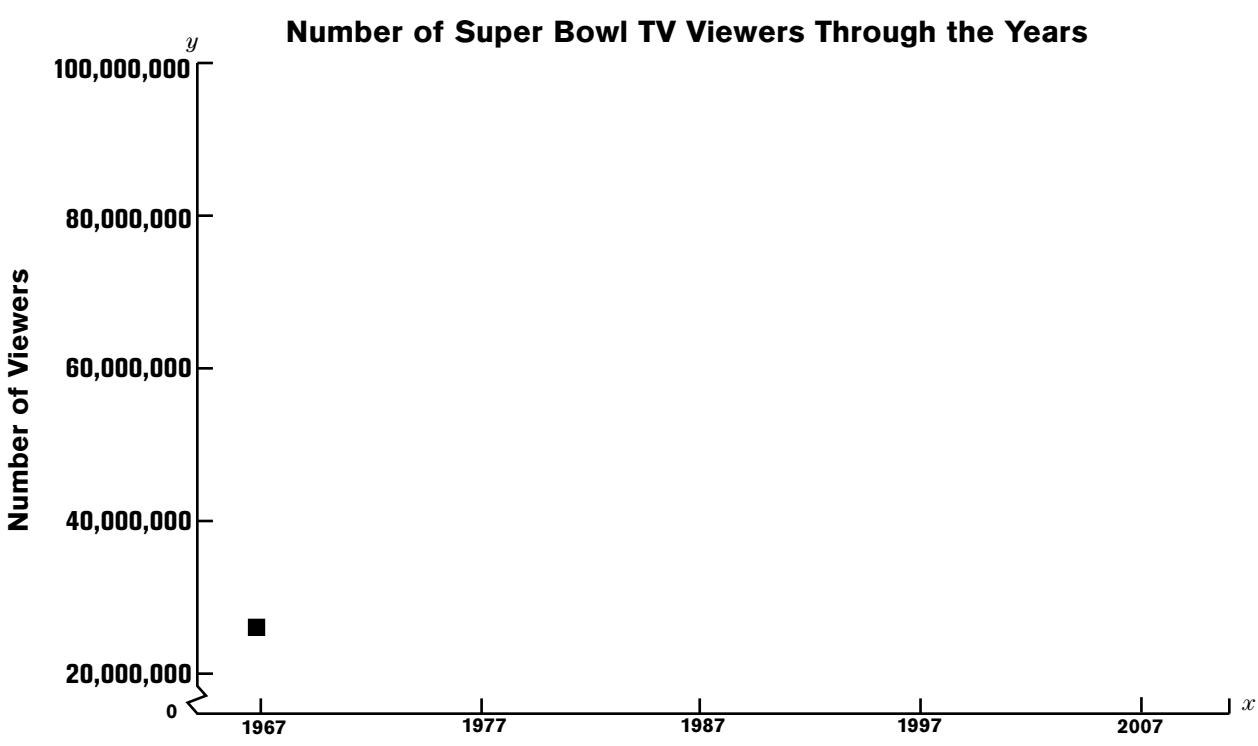
Use a line graph to pinpoint changes in data. Choose a line graph when you want to see how continuous changes to the independent variable affect the dependent variable. The Nielsen Company has been tracking the number of people who watch the Super Bowl on TV every year, since the first one was played in 1967. Suppose you were to graph how TV viewership of the Super Bowl has changed over time. The independent variable is the year, and the dependent variable is the number of Super Bowl viewers.

TO MAKE A LINE GRAPH:

1. On graph paper, draw a set of x- and y-axes.
2. Give your line graph a title ("Number of Super Bowl TV Viewers Through the Years").
3. Label the x-axis with the independent variable (Year), and include the values of the independent variable (1967, 1977, 1987, 1997, 2007).
4. Label the y-axis with the dependent variable (Number of Viewers). Use a scale featuring 0 to at least the highest number in the results of the dependent variable. If the data starts at a large number, you can use a broken scale [ ] to conserve space on the y-axis. On your graph, mark a broken scale with a zigzag on the y-axis between 0 and a round number smaller than your lowest data point.
5. Plot a point on the graph for each piece of data. **Example:** The number of Super Bowl TV viewers in 1967 was 24,430,000. To locate this point on your graph, draw an imaginary vertical line from the "1967" label on the x-axis. Then, draw an imaginary horizontal line from the "24,430,000" mark on the y-axis. Plot the point where the lines intersect.
6. Once you've plotted the points for all your data, connect the points.

Your Turn: Here are selected years along with the number of Super Bowl TV viewers for each year: 1977: 62,050,000; 1987: 87,190,000; 1997: 87,870,000; 2007: 93,184,000. Use the information to complete the line graph below.

Number of Super Bowl TV Viewers Through the Years



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