
MATH 11009: Scatter Plots with Excel

Example: The table below gives the number of executions in the United States for the decades beginning in 1930. Column 2 gives the number of years from 1900 to the end of the decade, and column 3 gives the number of executions in the given decade.

Decade	Years from 1900 to end of decade	Number of executions
1930–1939	40	1690
1940–1949	50	1284
1950–1959	60	717
1960–1969	70	191
1970–1979	80	3
1980–1989	90	117
1990–1999	100	518

1. Enter the data set

- Open a new worksheet in Excel.
- In cell A1, enter Years from end of decade, and in B1 enter the Number of executions
- Enter 40 in A2. To create the data set quickly, choose a regular increase in the value of 10. Then in A3 type “=A2+10”
- Position the mouse pointer on the lower right hand corner, until you see the black cross, and then left click and drag straight down until you have the column listed to 100, down to A8.
- Enter the values for the number of executions in each year in cells B2 thru B8

2. Graph the Scatter Plot

- To graph the function, highlight the data set. To do this, left click on cell A1 and hold the left mouse button down until you highlight the entire table that contains the data points.
- Click the **Insert** tab and then click **Scatter** in the chart section. Once in **Scatter** click on **Scatter with only markers**.
- You may now click on the chart and use the **Design**, **Layout**, and **Format** tabs at the top of the worksheet to format any portion of the graph, change axes, and label axes.

Example 1. Enter the data below into Excel and graph the scatter plot of the data using the window $[-20, 120]$ by $[0, 80]$.

x	-15	-1	25	40	71	110	116
y	12	16	10	32	43	62	74