

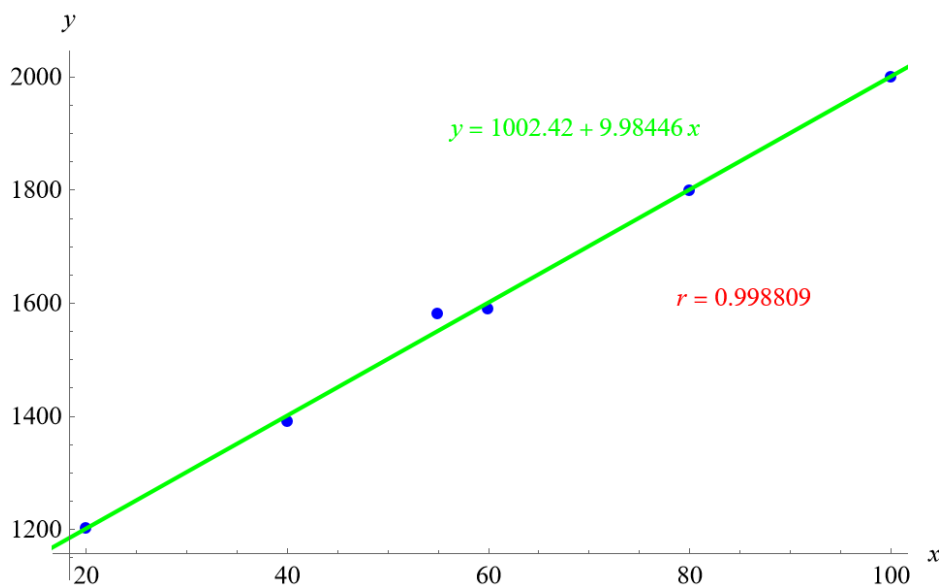
Exercise 30

For the following exercises, use each set of data to calculate the regression line using a calculator or other technology tool, and determine the correlation coefficient to 3 decimal places of accuracy.

x	100	80	60	55	40	20
y	2000	1798	1589	1580	1390	1202

Solution

Plot the following points on a graph: (100, 2000), (80, 1798), (60, 1589), (55, 1580), (40, 1390), and (20, 1202).



Mathematica's FindFit function gives

$$y = 1002.42 + 9.98446x,$$

and Mathematica's Correlation function gives $r = 0.998809$.