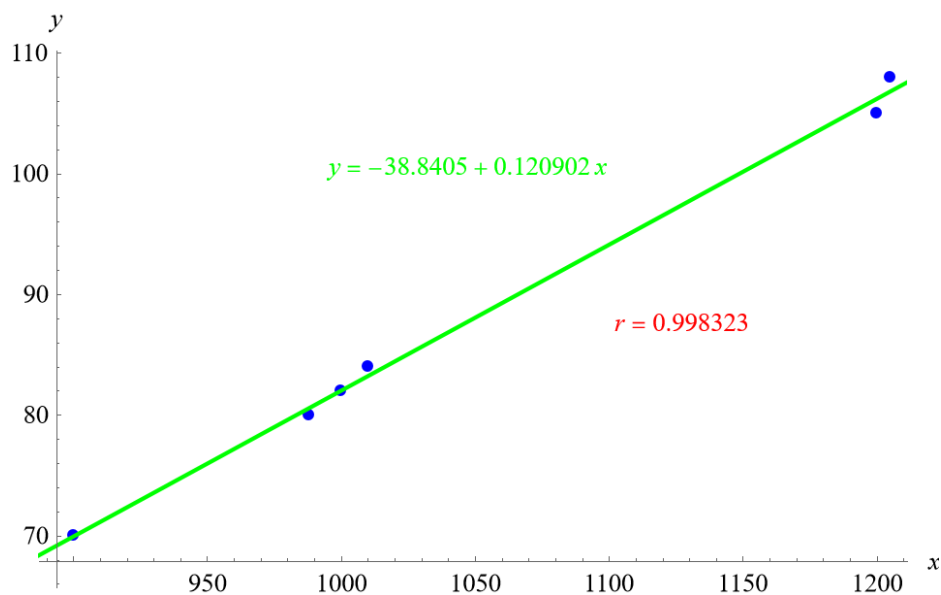## Exercise 31

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	900	988	1000	1010	1200	1205
y	70	80	82	84	105	108

Solution

Plot the following points on a graph: $(900, 70)$, $(988, 80)$, $(1000, 82)$, $(1010, 84)$, $(1200, 105)$, and $(1205, 108)$.

Mathematica's FindFit function gives

$$y = -38.8405 + 0.120902x,$$

and Mathematica's Correlation function gives $r = 0.998323$.