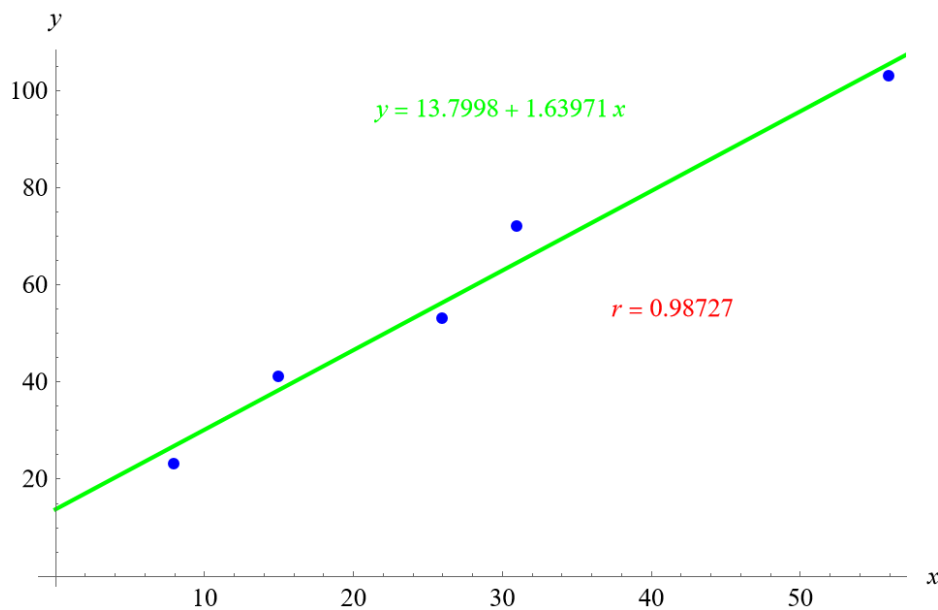## Exercise 25

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	8	15	26	31	56
y	23	41	53	72	103

Solution

Plot the following points on a graph: $(8, 23)$, $(15, 41)$, $(26, 53)$, $(31, 72)$, and $(56, 103)$.

Mathematica's FindFit function gives

$$y = 13.7998 + 1.63971x,$$

and Mathematica's Correlation function gives $r = 0.98727$.