

Exercise 38

For the following exercises, consider the data in Table 5, which shows the percent of unemployed in a city of people 25 years or older who are college graduates is given below, by year.

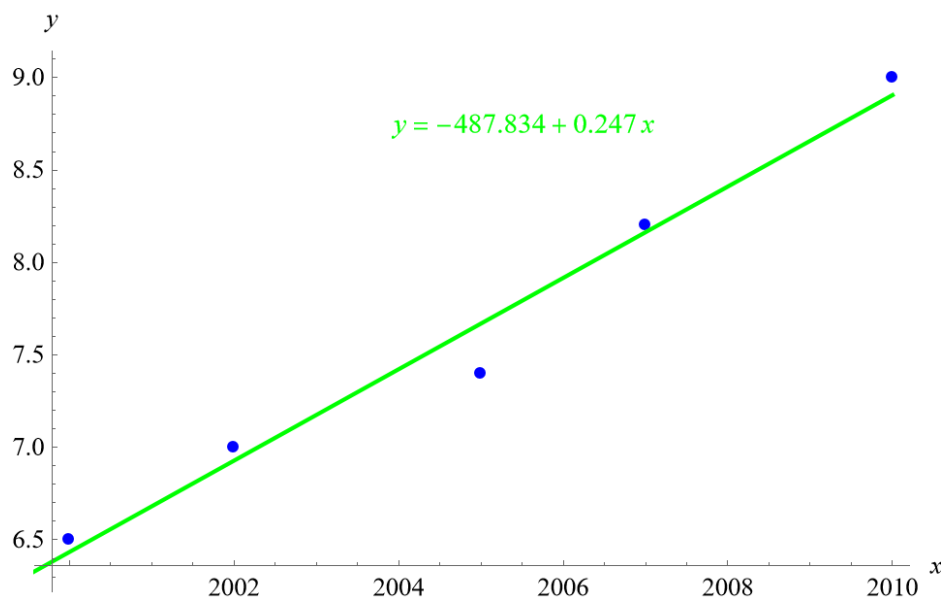
Year	2000	2002	2005	2007	2010
Percent Graduates	6.5	7.0	7.4	8.2	9.0

Table 5

Determine whether the trend appears to be linear. If so, and assuming the trend continues, find a linear regression model to predict the percent of unemployed in a given year to three decimal places.

Solution

Plot the following points: (2000, 6.5), (2002, 7.0), (2005, 7.4), (2007, 8.2), and (2010, 9.0).



Mathematica's FindFit function gives

$$y = -487.834 + 0.247x$$

for the line of best fit.