

## Exercise 26

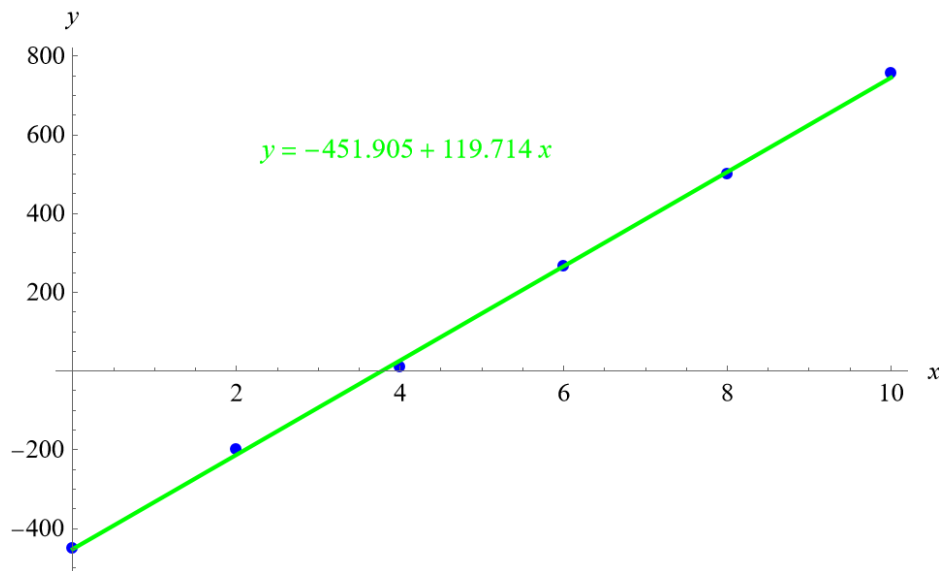
Draw a scatter plot for the data provided in Table 3. Then determine whether the data appears to be linearly related.

|      |      |    |     |     |     |
|------|------|----|-----|-----|-----|
| 0    | 2    | 4  | 6   | 8   | 10  |
| -450 | -200 | 10 | 265 | 500 | 755 |

Table 3

### Solution

Draw the following points on a graph:  $(0, -450)$ ,  $(2, -200)$ ,  $(4, 10)$ ,  $(6, 265)$ ,  $(8, 500)$ , and  $(10, 755)$ .



Mathematica's FindFit function gives

$$y = -451.905 + 119.714x$$

as the line that best fits the data. The data is linearly related.