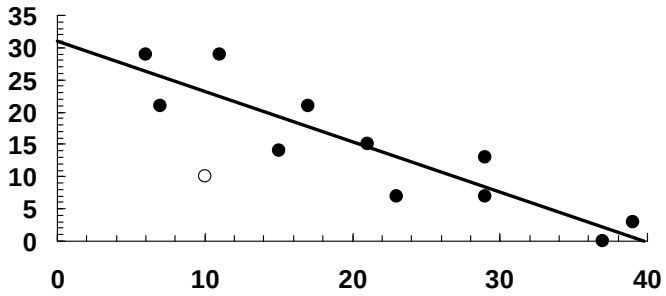
Solution 17.4

The results can be summarized as

$$y = 31.0589 - 0.78055x \qquad (s_{y/x} = 4.476306; r = 0.901489)$$

At x = 10, the best fit equation gives 23.2543. The line and data can be plotted along with the point (10, 10).



The value of 10 is nearly 3 times the standard error away from the line,

23.2543 – 3(4.476306) = 9.824516

Thus, we can tentatively conclude that the value is probably erroneous. It should be noted that the field of statistics provides related but more rigorous methods to assess whether such points are “outliers.”