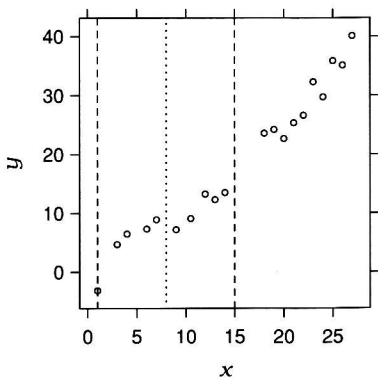
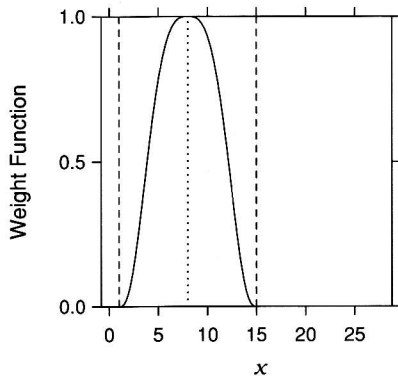


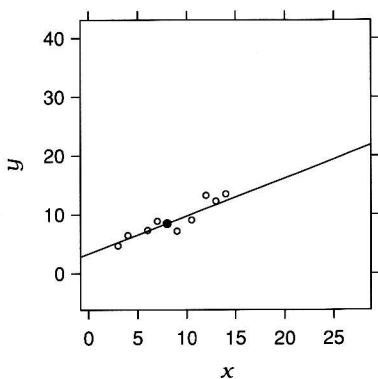
Step 1



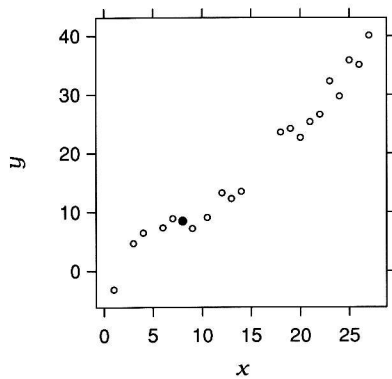
Step 2



Step 3



Result



3.49 HOW LOESS WORKS. The graphs show how the initial fit at $x = 8$ is computed. (Top left) α , which is 0.5, is multiplied by 20, the number of points, which gives 10. A vertical strip is defined around $x = 8$ so that one boundary is at the 10th nearest neighbor. (Top right) Weights are defined for the points using the weight function. (Bottom left) A line is fitted using weighted least-squares. The value of the line at $x = 8$ is the initial loess fit at $x = 8$. (Bottom right) The result is one point of the initial loess curve, shown by the filled circle.