Written Answers to Chapter 1 Problem 25

1. The residual for case 1 is 1.800. Found by using fit$residuals. It is the error value showing how far the data point for case one is from the estimated regression line
2. sum((fit$residuals)^2) gives the value of 17.600, which is the sum of the squared residuals (SSE). The MSE is the SSE/(n-2), which is 2.200. The MSE is an estimate of the variance (σ2).