Homework Solutions
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Exercise 31

(a) Let μ_1 be the mean reading score for the Strat method and μ_2 be the mean reading score for the Basal method. The hypotheses are

$$H_0 : \quad \mu_1 = \mu_2$$
$$H_1 : \quad \mu_1 > \mu_2$$

(b) The test statistic is $t = 1.839$ and the p-value is half of 0.073, or 0.0365. At the 5% level, we would reject H_0 and conclude that the average score for the Strat method is higher than the average score for the Basal method.

(c) In that case, $t = 1.839$ and the p-value is half of 0.73, or 0.0365, which is the same as before. So the decision and conclusion are the same as before.

(d) They are the same. Yes, it makes sense, because s_1 and s_2 are very close in value.