

Homework Solutions

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Exercise 11

- (a) Skip the QQ plot.
- (b) Use the formula

$$t = \frac{\bar{x} - \mu_0}{s/\sqrt{n}}.$$

Use **1-Var-Stats** to find \bar{x} and s . We get $\bar{x} = 4$ and $s = 2.132$. Then calculate t :

$$\begin{aligned} t &= \frac{4 - 3.1}{2.132/\sqrt{12}} \\ &= \frac{0.9}{0.6155} \\ &= 1.462. \end{aligned}$$

Then the p -value is $\text{tcdf}(1.462, \text{E}99, 11) = 0.858$.

- (c) At the 10% level, we should accept H_0 .
- (d) Yes, we could have made a Type II error.