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$$\text{Price} = 30.4953 - .2188 \times \text{Miles}$$

$$\begin{aligned} (-.2814 \leq \beta_1 \leq -.1562) & \leq 0 \\ \swarrow \\ -2188 - (2 \times .03) \leq \beta_1 \leq -2188 + (2 \times .0313) \end{aligned}$$

$$y = \beta_0 + \beta_1 x + \epsilon$$

$$\hat{y} = \hat{\beta}_0 + \hat{\beta}_1 x$$

THEORY

PRACTICE

$$H_0: \beta_1 = 0, \text{ i.e., No}$$

relationship

$$H_a: \beta_1 < 0 \quad \beta_1 \neq 0 \quad \beta_1 > 0 \quad \left. \vphantom{\begin{matrix} \beta_1 < 0 \\ \beta_1 \neq 0 \\ \beta_1 > 0 \end{matrix}} \right\} \text{one of these}$$