

## CHAPTER OVERVIEW

### 6: Hypothesis Testing with One Sample

One job of a statistician is to make statistical inferences about populations based on samples taken from the population. Confidence intervals are one way to estimate a population parameter. Another way to make a statistical inference is to make a decision about a parameter. For instance, a car dealer advertises that its new small truck gets 35 miles per gallon, on average. A tutoring service claims that its method of tutoring helps 90% of its students get an A or a B. A company says that women managers in their company earn an average of \$60,000 per year.

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[Null and Alternative Hypotheses \(Exercises\)](#)

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[Outcomes and the Type I and Type II Errors \(Exercises\)](#)

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[Distribution Needed for Hypothesis Testing \(Exercises\)](#)

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[Rare Events, the Sample, Decision and Conclusion \(Exercises\)](#)

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### Contributors

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