

CHAPTER OVERVIEW

8: 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.

8.1: Steps in Hypothesis Testing

8.1.1: Null and Alternative Hypotheses

8.1.2: Outcomes and the Type I and Type II Errors

8.1.3: Distribution Needed for Hypothesis Testing

8.1.4: Rare Events, the Sample, Decision and Conclusion

8.1.5: Additional Information on Hypothesis Tests

8.2: Hypothesis Test Examples for Means

8.3: Hypothesis Test Examples for Means with Unknown Standard Deviation

8.4: Hypothesis Test Examples for Proportions

8.E: Hypothesis Testing (Optional Exercises)

8.E: Distribution Needed for Hypothesis Testing (Optional Exercises)

8.E: Hypothesis Testing with One Sample (Optional Exercises)

8.E: Null and Alternative Hypotheses (Optional Exercises)

8.E: Outcomes and the Type I and Type II Errors (Optional Exercises)

8.E: Rare Events, the Sample, Decision and Conclusion (Optional Exercises)

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