

# Chapter 9

## Hypothesis Tests

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### Learning Objectives

1. Learn how to formulate and test hypotheses about a population mean and/or a population proportion.
2. Understand the types of errors possible when conducting a hypothesis test.
3. Be able to determine the probability of making a Type I error in hypothesis tests.
4. Know how to compute and interpret  $p$ -values.
5. Be able to use critical values to draw hypothesis testing conclusions.
6. Know the definition of the following terms:

null hypothesis  
alternative hypothesis  
Type I error  
Type II error  
one-tail test

two-tailed test  
 $p$ -value  
level of significance  
critical value