

Section 8.4 Hypothesis Test Practice

Quality control is an important aspect of manufacturing. A company manufactures soda-dispensing machines to fill bottles with 600 ml of soda. Older machines may dispense too much or too little soda into the bottles. When this occurs, such machines require adjustment. The owner of a soda dispensing machine believes that her machine has lost precision. She measures the amount of soda dispensed at 8 random times throughout the day. These amounts are: 600.15, 599.92, 599.85, 599.92, 599.81, 600.14, 600.04, 599.98. At 5% level of significance, is there sufficient evidence to conclude that this machine needs an adjustment? Research has indicated that the amounts of soda dispensed from the machine are approximately normal in their distribution. (This is a section 8.4 problem.)