
2012 Multiple Choice #10 Homework Problem

Thursday 04/16

10. A compact disc (CD) manufacturer wanted to determine which of two different cover designs for a newly released CD will generate more sales. The manufacturer chose 70 stores to sell the CD. Thirty-five of these stores were randomly assigned to sell CDs with one of the cover designs and the other 35 were assigned to sell the CDs with the other cover design. The manufacturer recorded the number of CDs sold at each of the stores and found a significant difference between the mean number of CDs sold for the two cover designs. Which of the following gives the conclusion that should be made based on the results and provides the best explanation for the conclusion?
- (A) It is not reasonable to conclude that the difference in sales was caused by the different cover designs because this was not an experiment.
 - (B) It is not reasonable to conclude that the difference in sales was caused by the different cover designs because there was no control group for comparison.
 - (C) It is not reasonable to conclude that the difference in sales was caused by the different cover designs because the 70 stores were not randomly chosen.
 - (D) It is reasonable to conclude that the difference in sales was caused by the different cover designs because the cover designs were randomly assigned to stores.
 - (E) It is reasonable to conclude that the difference in sales was caused by the different cover designs because the sample size was large.