Nielsen Ratings Case Study

List of top 20 shows in prime-time Nielsen ratings

Prime-time viewership numbers compiled by Nielsen Media Research for Jan. 26-Feb. 1. Listings include the week's ranking, with viewership for the week and season-to-date rankings in parentheses. An "X" in parentheses denotes a one-time-only presentation.

1. (X) Super Bowl XLIII: Arizona vs. Pittsburgh, NBC, 98.73 million viewers.
2. (X) Super Bowl postgame show, NBC, 57.4 million viewers.
3. (1) "American Idol" (Wednesday), Fox, 27.36 million viewers.
4. (2) "American Idol" (Tuesday), Fox, 25.54 million viewers.
5. (X) "American Idol" (Thursday), Fox, 24.61 million viewers.
6. (X) "The Office" (Sunday), NBC, 22.91 million viewers.
11. (19) "Without a Trace," CBS, 13 million viewers.
13. (22) "Eleventh Hour," CBS, 12.74 million viewers.
15. (18) "Lie to Me," Fox, 12.2 million viewers.
17. (22) "Lost," ABC, 11.23 million viewers.
18. (28) "Biggest Loser," NBC, 11.08 million viewers.
20. (36) "The Bachelor," ABC, 10.57 million viewers.
Case Closed! Exploratory Data Analysis

Nielsen ratings

Begin by reviewing the ratings data in the Nielsen ratings above. Then answer each of the following questions in complete sentences. Be sure to communicate clearly enough for any of your classmates to understand what you are saying.

1. Construct by hand an appropriate graphical display for comparing the Nielsen ratings of the three networks. Write a few sentences describing what you see.

2. Calculate numerical summaries for the Nielsen ratings of the three networks. Which measures of center and spread would you choose to compare the distributions? Explain.

3. Determine whether there are outliers in each of the three distributions. If there are outliers, identify them.

4. What does it mean to say that the mean percent of TV viewers watching a particular network is a nonresistant measure of center?

5. How would you rank the three networks based on your analysis? Explain.

6. What were the real results of the network rankings for that week? (NBC, FOX, CBS, ABC)