

The Typical Super Bowl Score?

Name _____

How many points will be scored this Super Bowl? To get a clearer idea lets look at the last eleven Super Bowl scores:

XLV	Feb. 6, 2011	Packers 31 Pittsburg 25
XLIV	Feb. 7, 2010	Saints 31 Colts 17
XLIII	Feb. 1, 2009	Pittsburgh 27 Arizona 23
XLII	Feb. 3, 2008	New York 17, New England 14
XLI	Feb. 4, 2007	Indianapolis 29, Chicago 17
XL	Feb. 5, 2006	Pittsburgh 21, Seattle 10
XXXIX	Feb. 6, 2005	New England 24, Philadelphia 21
XXXVIII	Feb. 1, 2004	New England 32, Carolina 29
XXXVII	Jan. 26, 2003	Tampa Bay 48, Oakland 21
XXXVI	Feb. 3, 2002	New England 20, St. Louis 17
XXXV	Jan. 28, 2001	Baltimore 34, N.Y. Giants 7

1. What is the mean score for the winning team in the Super Bowl? Make sure to show or explain your method.
2. What is the mean score for the losing team in the Super Bowl? Make sure to show or explain your method.
3. By using the mean of the winning and losing scores, what is the mean Super Bowl final score? By how many points on average does the winning team beat the losing team by?
4. Find the median score of the winning teams in the Super Bowl. Make sure to show or explain your method.
5. Find the median score of the losing teams in the Super Bowl. Make sure to show or explain your method.
6. By using the median of the winning and losing scores, what is the median Super Bowl final score? Using the median, by how many points on does the winning team beat the losing team by?
7. Now that you have used both the mean and median to explore the typical Super Bowl score, which statistic seems to better represent the data? Why?

8. Looking at all scores, winning or losing, is there a mode of the data set? If so, what is it? Knowing what you know about football, does it make sense that this score would be the mode?
9. Another statistic that we have not talked about is the range. Find the range for each:
- Which of the ten Super Bowls had the greatest range? Which Super Bowl was that and what was the range?
 - Find the range of the scores of the winning Super Bowl teams.
 - Find the range of the scores of the losing Super Bowl teams.
 - Find the range of all of the Super Bowl scores from the data set.
10. Next year we will add the 2012 Super Bowl score to this data set. How many points will the 2012 losing team need to score so that the new 12 year mean of the losing scores is exactly 20 points? How many points will the winning team need to score so that the 12-year mean is exactly 30 points? Show or explain your method.
11. If the 2012 Super Bowl score is 3 – 0, will that have a greater effect on the mean Super Bowl score or the median Super Bowl score? Show or explain your reasoning.