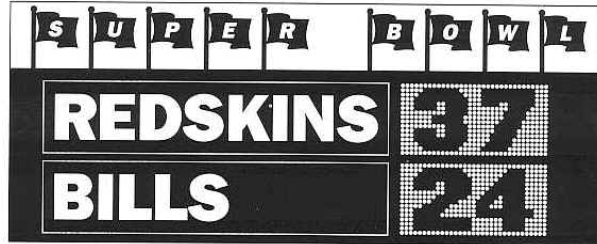


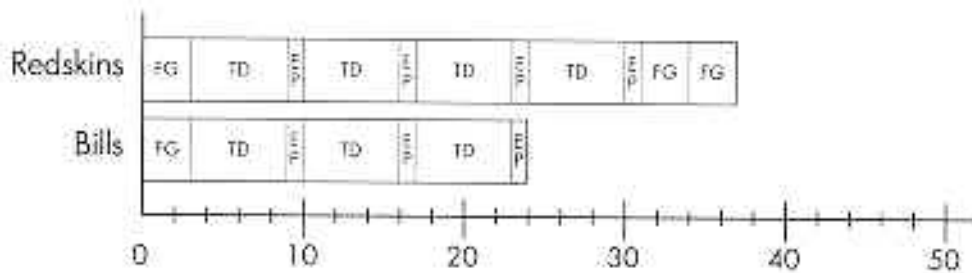
Super Bowl Scores

NAME _____

In the National Football League, teams score 3 points for a field goal, 2 points for a safety, 6 points for a touchdown, and 1 point for an extra point. The extra point can be scored only after a touchdown.



In 1992, the Washington Redskins beat the Buffalo Bills by the score of 37 to 24. Washington scored its points by making four touchdowns and three field goals. Buffalo scored three touchdowns and one field goal. Both teams made all their extra points. The bar graph below shows the scoring for each team.



FG = field goal TD = touchdown EP = extra point

1. How many additional touchdowns (with extra points) and/or field goals would Buffalo need to have scored to win the game?
2. The record for most total points in a Super Bowl prior to 1993 was 66, set in 1977 when the Pittsburgh Steelers beat the Dallas Cowboys 35 to 31. What is the minimum number of additional points Washington and Buffalo would need to have scored to break the record?

In how many ways could exactly this number of points have been scored?

3. If neither the Redskins nor the Bills had a safety, how could the teams have ended with the same score (37 – 24) by scoring different combinations of touchdowns and field goals?
4. In Super Bowl XXVI, forty-eight footballs were used for the game. Washington made 73 plays from the line of scrimmage. Buffalo made 82. If the referees tried to use each football an equal number of times, what is the average number of plays for which each football was used?