

Ch 1 The Power of Information

Sec. 1.1 - Constructing and Interpreting Visual Displays of Data

1. a) Create a Bar Graph that has “Team” as the independent variable and “QB yards total” as the dependent variable. Chose at least 10 teams above or below your team in the standings. Include your team.
- b) Create a histogram of all the QB’s in the NFL and their completions. Create a histogram with 5 bins. Record the information in a frequency distribution table.
- c) Create a Pie graph that represents the Total receptions of the Receivers that are on your team. Compare the players receptions to the “Total yards receiving” for the team.
- d) Create a scatter plot with a line of best fit that compares a QB’s “Total Attempts” vs “TD’s” Choose 15 QB’s above or below your QB. Include your QB.
- e) Create a Pictograph that represents the Total receptions of the receivers from 8 teams. Include your team and a legend describing the pictograph symbol.

Sec. 1.2 Conclusions and Issues.

2.a) Create a Split Bar Graph on Corel Quattro Pro.

Place the QB’s completion values into 5 classes. Use all the main QB’s in the NFL (32 of them)
The Split-bar graph should compare the AFC to the NFC.

b) What conclusion could be made about QB completions in the AFC compared to the NFC?

Sec. 1.3 The Power of Visualizing Trends And Sec.1.4 Trends Using Technology

3. Create a scatter plot diagram of “4th down attempts” (Independent) vs. “4th downs made” (Dependent)
Choose 20 teams and include your team. Use a spreadsheet.

4. Discuss any trends in the data - strong, weak, positive, negative correlation?

5. Find the Line of Best (LinReg) and the Curve of Best fit (QuadReg)
Write out their formulas and their coefficient of Determination for both.
Which curve is the best fit?

6. Construct a Residual Plot for the Line of Best fit.

7. Find the average residual value.