

Stat 185 -Quiz 2

Friday, Sept 15

Name: _____

Feel free to write your answer to number 3 as labels on the reverse. Please write complete solutions to numbers 1 and 2 on separate paper.

- Given the data set $\{-1, 2, 3, 4\}$,
 - Write down a formula showing that the mean of the data set is 2
 - Write down a formula to compute the standard deviation of the data set.
- 127 teams played Division 1 college football in 2016. On average, those teams scored 29.8 points per game with a standard deviation of 6.8.
 - Assuming the data is well modeled by a normal distribution, approximately how many teams scored more than 35 points a game?
 - Figure 1 shows a normal probability plot for the data. What, if anything, does this tell you about your answer to part (a)?
- Figure 2 on the reverse shows several scatter plots. Label those scatter plots with their correlation chosen from the following list:
 - -0.779
 - -0.033
 - 0.54
 - 0.85

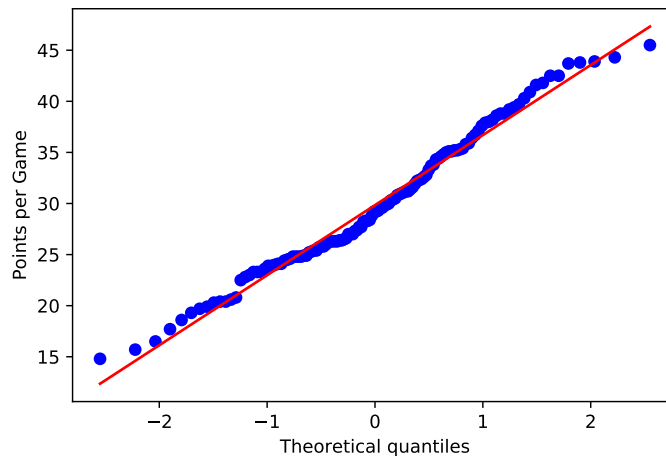


Figure 1: A normal probability plot

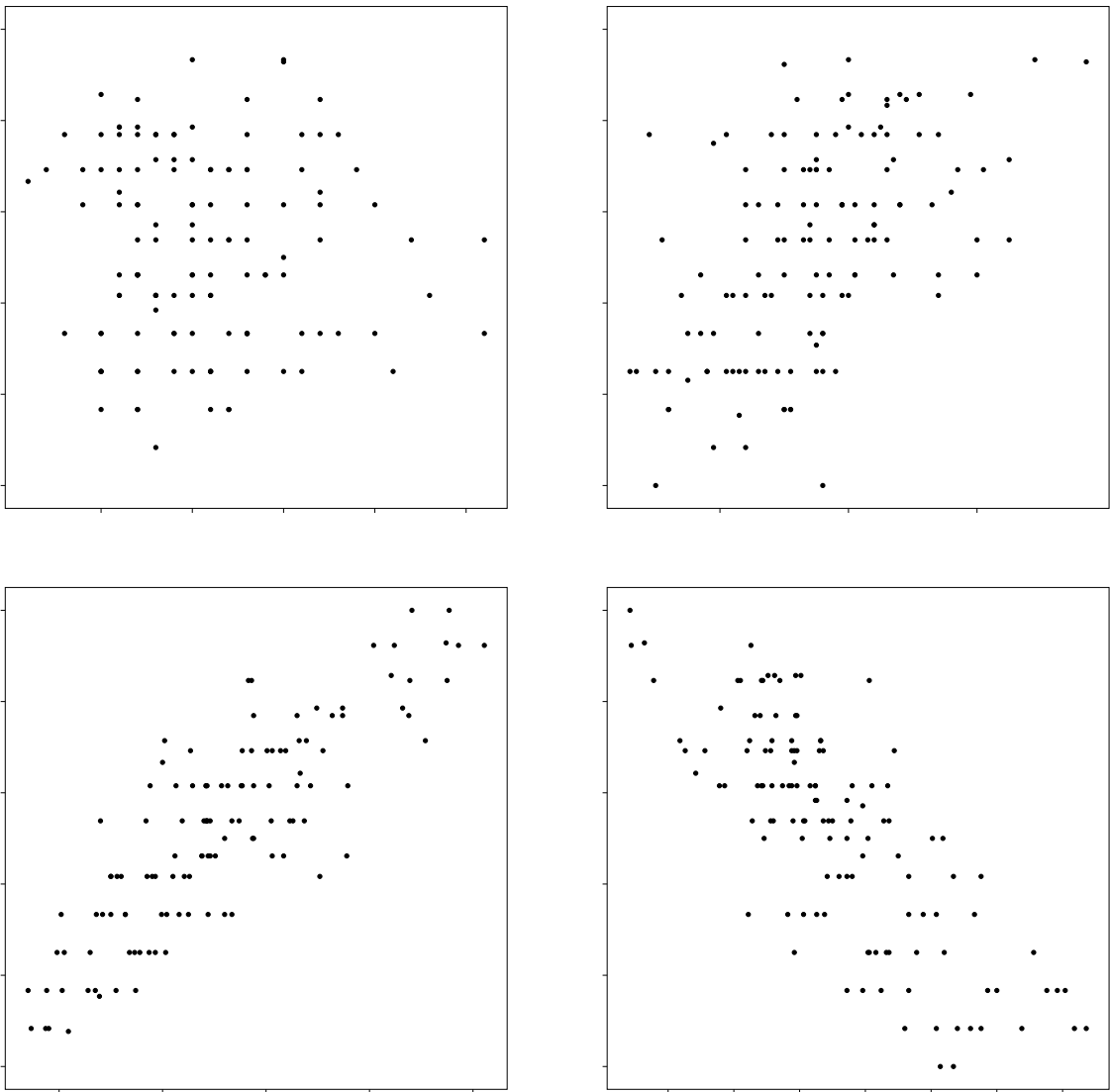


Figure 2: Scatter plots to match with their correlations on the reverse