

Assignment 5

Pranav Tikkawar

August 13, 2024

Question 1

The mean time it take Jens to beat his brother is 64.227 seconds and the mean time it takes Sven to beat his brother is 122.839 seconds.

Question 2

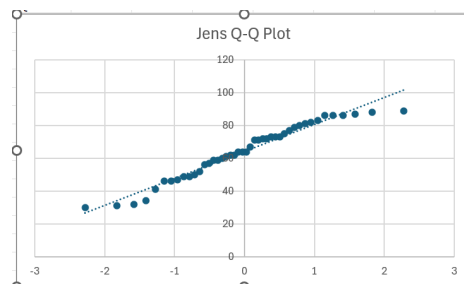


Figure 1: Q-Q plot of the durations of the games Jens won

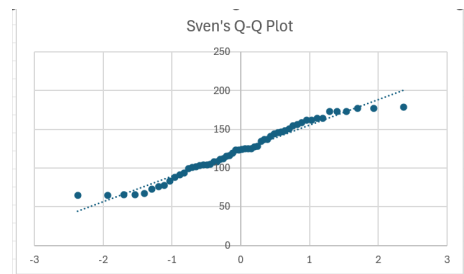


Figure 2: Q-Q plot of the durations of the games Sven won

Question 3

The distribution of duration for the games Sven won follows a normal curve near the middle of the data but tends to trail off at the ends. It looks like the example 3 in the assessing normality slides, the thin tailed distribution.

The distribution of duration for the games Jens won follows a normal curve near the middle of the data but tends to trail off at the ends. It looks like the example 3 in the assessing normality slides, the thin tailed distribution.

Question 4

The 70% confidence interval for the difference in mean time it takes Sven to beat his brother and the mean time it takes Jens to beat his brother is (53.25, 63.97)

Question 5

Despite the fact that Sven won more games, the mean time it takes Jens to beat his brother is 64.227 seconds and the mean time it takes Sven to beat his brother is 122.839 seconds. Also Jens has a lower standard deviation than Sven. So, I would say that Jens is the better player as he is more consistent and takes less time to win.