

HOMEWORK 4 ANSWERS

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1. QUESTION 4.1

The mean is 47.048 The variance is 190.992

- (1) 0.498583
- (2) 0.360506
- (3) 0.530182
- (4) 0.235685
- (5) 0.662161
- (6) 0.631691

2. QUESTION 4.2

- (1) 0.423233
- (2) 0.601790
- (3) 0.883635
- (4) 0.931047
- (5) 0.360261
- (6) 0.166328
- (7) 0.399693

3. QUESTION 4.3

Both appear to be approximately normally distributed. The Calorie data does appear to have three distinct groupings, which I suspect is the result of the three different types of meat (beef, mean, poultry). Sodium would better fit the normal distribution if the single outlier at the low end was removed.

4. QUESTION 4.4

- 0.433784
- 0.142
- 0.980056

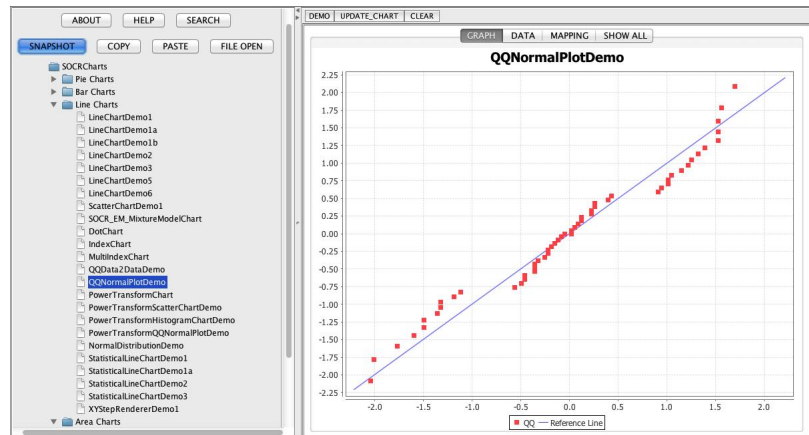


FIGURE 1. QQplot of Calories

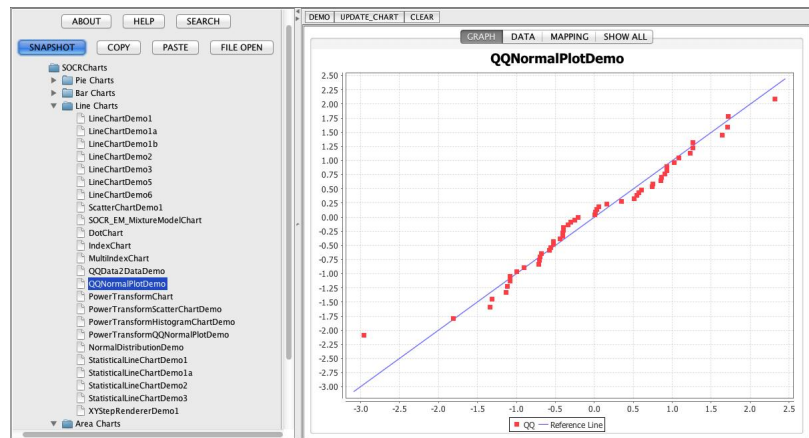


FIGURE 2. QQplot of Sodium

5. QUESTION 4.5

Using the Normal approximation of the Binomial.

- 0.212441
- 0.817038
- 0.883677
- 0.001688

6. QUESTION 4.6

- 0.434505

- 0.124250
- 0.329838