Problem 4.6

Part (a). Means

Texture Perimeter

Benign [17.1157 76.96375]

Malignant [ 21.4498 114.53195]

Part (b). Variance

Texture Perimeter

Benign [ 11.27652514 127.96211401]

Malignant [ 13.89054569 472.34102382]

Part (c). Four Plots

A graph with a red line

Description automatically generated

A graph with a red line

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Description automatically generated

Part (d). Exponential histogram

A graph of flight delay

Description automatically generated

Part (e). Probability, fraction, comment

Probability[Z > 60] = 0.32109077601786185

Fraction of flights delayed by more than 60 mins = 1205/4611 ~ 0.261

Comment: This is an ok approximation – the percent error is about 22.8%, which is not very ideal, but I suppose it’s not outrageous. The plot also generally fits the data, so it is not a terrible approximation.