Dr Oliver Mathematics
Box Plots: Compare and Contrast

In this note, we look to see how you compare two box plots. We will use 1.5 times the interquartile range to find outliers.

1. The following tables show the marks scored in a test by two groups of eleven students.

$$\begin{aligned} \text{Group A}: &\quad 5, 6, 13, 13, 15, 17, 18, 18, 21, 22, 34 \\ \text{Group B}: &\quad 6, 10, 11, 14, 14, 15, 19, 20, 23, 23, 26 \end{aligned}$$

   (a) Find the quartiles for Group A.

   (b) Find the quartiles for Group B.

   (c) On the same axes draw box plots for these data.

   (d) Compare and contrast the two data sets.

2. The following tables show the times taken (in seconds) by two groups of eleven students.

$$\begin{aligned} \text{Group A}: &\quad 49, 34, 55, 68, 57, 59, 65, 38, 63, 60, 66 \\ \text{Group B}: &\quad 47, 40, 55, 64, 42, 70, 43, 21, 44, 55, 53 \end{aligned}$$

   (a) Find the quartiles for Group A.

   (b) Find the quartiles for Group B.

   (c) On the same axes draw box plots for these data.

   (d) Compare and contrast the two data sets.