

IQR

Interquartile Range(IQR)

a. The interquartile range. Compare the two interquartile ranges.

b. Any outliers in either set.

The five number summary for the day and night classes is

	Minimum	Q_1	Median	Q_3	Maximum
Day	32	56	74.5	82.5	99
Night	25.5	78	81	89	98

Day: $IQR = Q_3 - Q_1$

$$IQR = 82.5 - 56$$

$$IQR = 26.5$$

NIGHT: $IQR = Q_3 - Q_1$

$$IQR = 89 - 78$$

$$IQR = 11$$

DAY

$$\text{Lesser Outlier} = Q_1 - 1.5 * IQR$$

$$= 56 - 1.5 * 26.5$$

$$\text{Lesser Outlier} = 16.25$$

$$\text{Greater Outlier} = Q_3 - 1.5 * IQR$$

$$= 82.5 - 1.5 * 26.5$$

$$\text{Greater Outlier} = 122.25$$