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= Q3-Q1

   = 82.5-56 =26.5

1.5*IQR= 1.5*26.5

      = 39.75

Lesser IQR= Q1-1.5*IQR

         = 56-39.75= 16.25

Greater IQR= Q3+1.5*IQR

         = 82.5+39.75= 122.25

NIGHT:

IQR= Q3-Q1

   = 89-78 = 11

1.5*IQR= 1.5*11

      = 16.5

Lesser IQR= Q1-1.5*IQR

         = 78-16.5= 61.5

Greater IQR= Q3+1.5*IQR

         = 89+16.5= 105.5

There is outlier present in day data. Only lesser outlier is present in night data so this can be replaced with 61.5.