What is the reason for multiplying by 1.5 with IQR?

The interquartile (IQR) method of outlier detection uses 1.5 as its scale to detect outliers because it most closely follows Gaussian distribution. As a result, the method dictates that any data point that's 1.5 points below the lower bound quartile or above the upper bound quartile is an outlier.

Class	Minimum	Q1	Median	Q3	Maximum
Day	32	56	74.5	82.5	99
Night	25.5	78	81	89	98

IQR	=	Q3 - Q1	
Class	**Q3**	**Q1**	**IQR**
Day	82.5	56	**26.5**
Night	89	78	**11**

	Lesser Outlier Range =	Q1 - 1.5 * IQR		
Class	**Q1**	**Outlier Scale**	**IQR**	**Lesser Outlier Range**
Day	**56**	**1.5**	**26.5**	**16.25**
Night	**78**	**1.5**	**11**	**61.5**

	Greater Outlier Range =	Q3 + 1.5 * IQR		
Class	**Q3**	**Outlier Scale**	**IQR**	**Greater Outlier Range**
Day	82.5	**1.5**	**26.5**	**122.25**
Night	89	**1.5**	**11**	**105.5**

Summary		
For Day Class:	**Lesser Range**	**Greater Range**
Outlier Range	**16.25**	**122.25**
All data (32–99) lie within this → **No outliers**.		
For Night Class:	**Lesser Range**	**Greater Range**
Outlier Range	**61.5**	**105.5**
All data (25.5–98) → Check: Minimum (25.5) < 61.5 → **Outlier detected (25.5)**		