

1.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i = 4.844$$

$$\sigma_x^2 = \frac{1}{n} \sum_{i=1}^n x_i^2 - \bar{x}^2 = 3.342$$

Ordered:

1.23, 2.77, 3.09, 3.16, 3.27, 3.36, 3.37, 3.57, 3.58, 3.85, 3.9, 3.93, 3.98, 4.05, 4.12, 4.19, 4.4, 4.47, 4.49, 4.66, 4.72, 4.78, 4.82, 5.0, 5.24, 6.36, 7.15, 7.16, 7.82, 7.98, 7.99, 8.52, 8.86

Median: 4.4

2. $Q_2 = \text{Median} = 4.4$

$$Q_1 = (3.57 + 3.58) / 2 = 3.575$$

$$Q_3 = (5.24 + 6.36) / 2 = 5.8$$

$$\text{IQR} = Q_3 - Q_1 = 5.8 - 3.575 = 2.225$$

3. Boxplot:

