

$$7. \quad a) \quad z = \frac{X - \mu}{\sigma}$$

$$z = \frac{5.3 - 9.429166667}{7.242609979}$$

$$z = -0.57$$

$$\mu = 9.429166667$$

$$\sigma = 7.242609979$$

$$Q_1 = 4.4$$

$$Q_2 (\text{MED}) = 8.25$$

$$Q_3 = 11.95$$

$$b) \quad Q_1 = 4.4, Q_2 = 8.25, Q_3 = 11.95$$

$$c) \quad IQR = Q_3 - Q_1 = 11.95 - 4.4 = 7.55$$

$$\begin{aligned} d) \quad LF &= Q_1 - 1.5(IQR) \\ &= 4.4 - 1.5(7.55) \\ &= -6.925 \end{aligned}$$

$$\begin{aligned} UF &= Q_3 + 1.5(IQR) \\ &= 11.95 + 1.5(7.55) \\ &= 23.275 \end{aligned}$$

38.6  
OUTLIER