

Q-1 (a)

Type A:	2.7	2.9	4.1	4.3	5.7	6.6	9.0	15.0
Type B:	1.0	1.0	1.8	2.3	2.3	3.3	3.5	5.5

$$n = 8 \Rightarrow \text{Position of } Q_1 = \frac{n+1}{4} = \frac{9}{4} = 2.25 \Rightarrow 2 \text{ \& } 3$$

$$Q_2 = 2\left(\frac{n+1}{4}\right) = 2(2.25) = 4.5 \Rightarrow 4 \text{ \& } 5$$

$$Q_3 = 3\left(\frac{n+1}{4}\right) = 3(2.25) = 6.75 \Rightarrow 6 \text{ \& } 7$$

Type A

Type B

$$(i) Q_1 = \frac{2.9 + 4.1}{2} = 3.5$$

$$Q_1 = \frac{1.0 + 1.8}{2} = 1.4$$

$$Q_2 = \frac{4.3 + 5.7}{2} = 5$$

$$Q_2 = \frac{2.3 + 2.3}{2} = 2.3$$

$$Q_3 = \frac{6.6 + 9.0}{2} = 7.8$$

$$Q_3 = \frac{3.3 + 3.5}{2} = 3.4$$

$$(ii) IQR = Q_3 - Q_1 = 7.8 - 3.5 = 4.3$$

$$IQR = Q_3 - Q_1 = 3.4 - 1.4 = 2.0$$

$$\begin{aligned} UF &= Q_3 + 1.5 IQR \\ &= 7.8 + 1.5(4.3) \\ &= 14.25 \end{aligned}$$

$$\begin{aligned} UF &= Q_3 + 1.5 IQR \\ &= 3.4 + 1.5(2.0) \\ &= 6.4 \end{aligned}$$

$$\begin{aligned} LF &= Q_1 - 1.5 IQR \\ &= 3.5 - 1.5(4.3) \\ &= -2.95 \end{aligned}$$

$$\begin{aligned} LF &= Q_1 - 1.5 IQR \\ &= 1.4 - 1.5(2.0) \\ &= -1.6 \end{aligned}$$