

# Activity

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2203AS2014

$$1) X = [1, 2, 3, 4, 5, 12, 13, 76]$$

Sort

$$X = [1, 2, 3, 4, 5, 12, 13, 76]$$

$$Q_2 = 4.5 \quad Q_3 = 13$$

$$Q_1 = 2$$

$$IQR = 11$$

$$w_1 = Q_1 - (IQR \times 1.5)$$

$$= 2 - (11 \times 1.5)$$

$$= -14.5$$

$$w_2 = Q_3 + (IQR \times 1.5)$$

$$= 13 + (11 \times 1.5)$$

$$= 29.5$$

outliers = 76



$w_1$	$Q_1$	$Q_2$	$Q_3$	$w_2$
-14.5	2	4.5	13	29.5

$$2) Y = [2, 5, 56, 23, 12, 1, 9, 50]$$

Sort

$$Y = [1, 2, 5, 9, 12, 23, 50, 56]$$

$$Q_2 = 10.5 \quad Q_1 = 2$$

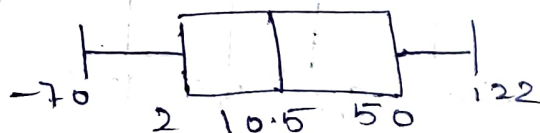
$$Q_3 = 50 \quad IQR = 48$$

$$w_1 = 2 - (48 \times 1.5)$$

$$= -70$$

$$w_2 = 50 + (48 \times 1.5)$$

$$= 122$$



no outliers

$$3) A = [9, 8, 6, 7, 34, 12, 12]$$

Sort

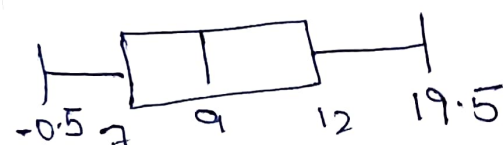
$$A = [6, 7, 8, 9, 12, 12, 34]$$

$$Q_1 = 7, Q_2 = 9, Q_3 = 12$$

$$IQR = 5$$

$$W_1 = 7 - (5 * 1.5) = -0.5$$

$$W_2 = 12 + 7.5 = 19.5$$



outliers = 34

$$4) B = [12, 13, 16, 1, 18, 19]$$

Sort

$$B = [1, 12, 13, 16, 18, 19]$$

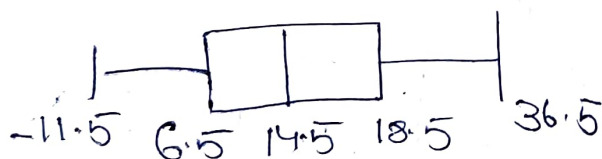
$$Q_1 = 6.5, Q_2 = 14.5$$

$$Q_3 = 18.5$$

$$IQR = 12$$

$$W_1 = 6.5 - (12 * 1.5) = -11.5$$

$$W_2 = 18.5 + (12 * 1.5) = 36.5$$



no outliers

$$5) C = [12, 78, 3, 7, 8, 5, 23]$$

Sort

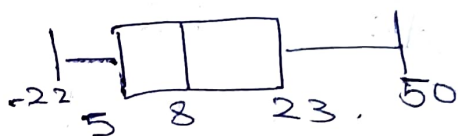
$$C = [3, 5, 7, 8, 12, 23, 78]$$

$$Q_1 = 5, Q_2 = 8$$

$$Q_3 = 23, IQR = 18$$

$$W_1 = 5 - (18 * 1.5) = -22$$

$$W_2 = 23 + (18 * 1.5) = 50$$



outliers = 78

$$6) D = [34, 6, 7, 8, 9, 90, 23]$$

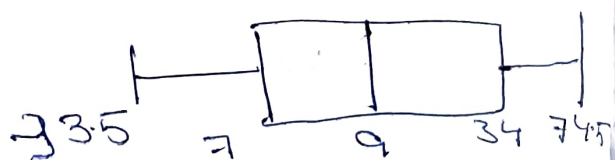
$$D = [6, 7, 8, 9, 23, 34, 90]$$

$$Q_2 = 9, Q_1 = 7, Q_3 = 34$$

$$IQR = 27$$

$$W_1 = 7 - (27 * 1.5) = -33.5$$

$$W_2 = 34 + (27 * 1.5) = 74.5$$



outliers = 90