

To calculate location of median,

lower quartile and upper quartile:

(Assume data is ordered from smallest to largest.)

If  $n$  even (i.e. there are an even # of data), then the location of  $M$ ,  $Q_1$ , &  $Q_3$  will be

$$M \text{ at } \frac{n+1}{2}$$

$$Q_1 \text{ at } \frac{n+2}{4}$$

$$Q_3 \text{ at } \frac{3n+2}{4}$$

If  $n$  odd (i.e. there are an odd # of data), then the location of  $M$ ,  $Q_1$ , &  $Q_3$  will be

$$M \text{ at } \frac{n+1}{2}$$

$$Q_1 \text{ at } \frac{n+1}{4}$$

$$Q_3 \text{ at } \frac{3n+3}{4}$$