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

\[
M \text{ at } \frac{n+1}{2} \\
Q_1 \text{ at } \frac{n+1}{4} \\
Q_3 \text{ at } \frac{3n+3}{4}
\]