when $r=2$, $\mu_2' = \frac{1}{N}\sum_{i=1}^{N} f_i (x_i - A)^2$

$r=3$ $\quad \mu_3' = \frac{1}{N}\sum_{i=1}^{N} f_i (x_i - A)^3$

$r=4$ $\quad \mu_4' = \frac{1}{N}\sum_{i=1}^{N} f_i (x_i - A)^4$

Other form

If $u = \frac{x_i - A}{h}$

Then $\mu_r' = \frac{1}{N}\left[\sum_{i=1}^{n} f_i u_i^r\right] h^r$

$r = 0, 1, 2 \ldots$

Moments about the Origin :→ If $x_1, x_2, x_3 \ldots x_n$ are the values and $f_1, f_2, \ldots f_n$ are frequencies. Then moment about the origin denoted by V_r, then

$$V_r = \frac{1}{N}\sum_{i=1}^{n} f_i x_i^r ; \quad r = 0, 1, 2 \ldots$$

$$N = \sum_{i=1}^{n} f_i$$

For $r=0$, $V_0 = \frac{1}{N}\sum_{i=1}^{n} f_i x_i^0 = 1$

$r=1$, $V_1 = \frac{1}{N}\sum_{i=1}^{n} f_i x_i = \bar{x}$ = Mean

$r=2$, $V_2 = \frac{1}{N}\sum_{i=1}^{n} f_i x_i^2$ and so on