$$\sum_{i=0}^{n-1} i = \frac{n\cdot(n-1)}{2} \qquad \sum_{i=0}^{n-1} i^2 = \frac{n\cdot(n-1)\cdot(2\cdot n-1)}{6}$$

$$\sum_{i=0}^{n-1} (n-i) = \sum_{i=0}^{n-1} (i+1) = \frac{n\cdot(n+1)}{2} \qquad \sum_{i=0}^{n-1} (n-i)^2 = \sum_{i=0}^{n-1} (i+1)^2 = \frac{n\cdot(n+1)\cdot(2\cdot n+1)}{6}$$

$$SMA_n = \frac{\sum_{i=0}^{n-1} p_i}{n} \qquad \sum_{i=0}^{n-1} p_i = n\cdot SMA_n$$

$$LWMA_n = \frac{\sum_{i=0}^{n-1} \left((n-i)\cdot p_i\right)}{\sum_{i=0}^{n-1} (n-i)} = 2\cdot\frac{n\cdot\sum_{i=0}^{n-1} p_i - \sum_{i=0}^{n-1} \left(i\cdot p_i\right)}{n\cdot(1+n)} = 2\cdot\frac{n^2\cdot SMA_n - \sum_{i=0}^{n-1} \left(i\cdot p_i\right)}{n\cdot(1+n)}$$

$$\sum_{i=0}^{n-1} \left(i\cdot p_i\right) = n^2\cdot SMA_n - \frac{n\cdot(1+n)\cdot LWMA_n}{2}$$

$$a_n = \frac{\left(\sum_{i=0}^{n-1} i\right)\cdot\left(\sum_{i=0}^{n-1} p_i\right) - n\cdot\sum_{i=0}^{n-1} \left(i\cdot p_i\right)}{\left(\sum_{i=0}^{n-1} i\right)^2 - n\cdot\sum_{i=0}^{n-1} i^2} = \frac{\left(\frac{n\cdot(n-1)}{2}\right)\cdot\left(\sum_{i=0}^{n-1} p_i\right) - n\cdot\sum_{i=0}^{n-1} \left(i\cdot p_i\right)}{\left(\frac{n\cdot(n-1)}{2}\right)^2 - \frac{n^2\cdot(n-1)\cdot(2\cdot n-1)}{6}}$$

$$a_n = \frac{\left(n\cdot(n-1)\right)\cdot\left(\sum_{i=0}^{n-1} p_i\right) - 2\cdot n\cdot\sum_{i=0}^{n-1} \left(i\cdot p_i\right)}{\frac{\left(n\cdot(n-1)\right)^2}{2} - \frac{n^2\cdot(n-1)\cdot(2\cdot n-1)}{3}} = \frac{6\cdot\left(n\cdot(n-1)\right)\cdot\left(\sum_{i=0}^{n-1} p_i\right) - 12\cdot n\cdot\sum_{i=0}^{n-1} \left(i\cdot p_i\right)}{3\cdot\left(n\cdot(n-1)\right)^2 - 2\cdot n^2\cdot(n-1)\cdot(2\cdot n-1)}$$

$$a_n = \frac{6\cdot(n-1)\cdot\left(n\cdot SMA_n\right) - 12\cdot\left(n^2\cdot SMA_n - \frac{n\cdot(1+n)\cdot LWMA_n}{2}\right)}{-n\cdot(n-1)\cdot(n+1)}$$

$$a_n = \frac{6\cdot(n-1)\cdot SMA_n - (12\cdot n)\cdot SMA_n + 6\cdot(1+n)\cdot LWMA_n}{(1-n)\cdot(1+n)}$$

$$a_n = 6\cdot\frac{-(1+n)\cdot SMA_n + (1+n)\cdot LWMA_n}{(1-n)\cdot(1+n)} = 6\cdot\frac{LWMA_n - SMA_n}{1-n} = \frac{6}{1-n}\cdot\left(LWMA_n - SMA_n\right)$$

$$b_n = \frac{\sum_{i=0}^{n-1} p_i - a\cdot\sum_{i=0}^{n-1} i}{n} = \frac{n\cdot SMA_n - a\cdot\frac{n\cdot(n-1)}{2}}{n} = SMA_n - a\cdot\frac{n-1}{2} = SMA_n + a\cdot\frac{1-n}{2}$$

$$b_n = SMA_n + \frac{1-n}{2}\cdot\frac{6}{1-n}\cdot\left(LWMA_n - SMA_n\right) = SMA_n + 3\cdot\left(LWMA_n - SMA_n\right) = 3\cdot LWMA_n - 2\cdot SMA_n$$

$$y_{n,i} = a_n\cdot i + b_n \qquad a_n = \frac{6}{1-n}\cdot\left(LWMA_n - SMA_n\right) \qquad b_n = 3\cdot LWMA_n - 2\cdot SMA_n$$