

$$T_{r=0}(i_p, n_p; i_o, n_o) = \left(1 - \frac{n_p - 1}{N}\right) \frac{n_p - i_p}{n_p} \sum_{r=0}^{r_{max}} T_r(i_p, n_p - 1; i_o, n_o - 1) \quad \begin{array}{c} \circ \\ \circ \end{array} \left[ \begin{array}{c} \\ \end{array} \right] \quad (A)$$

$$+ \frac{n_p - i_p}{N} \sum_{r=0}^{r_{max}} T_r(i_p, n_p; i_o, n_o - 1) \quad \begin{array}{c} \circ \\ \nearrow \circ \end{array} \left[ \begin{array}{c} \\ \end{array} \right] \quad (B)$$

$$+ \left(1 - \frac{n_p - 1}{N}\right) \frac{i_p}{n_p} \sum_{r=0}^{r_{max}} (1 - s)^{1 - \delta_{r, r_{max}}} T_r(i_p - 1, n_p - 1; i_o - 1, n_o - 1) \quad \bullet \bullet \left[ \begin{array}{c} \\ \end{array} \right] \quad (C)$$

$$+ \frac{i_p}{N} \sum_{r=0}^{r_{max}} (1 - s)^{1 - \delta_{r, r_{max}}} T_r(i_p, n_p; i_o - 1, n_o - 1) \quad \begin{array}{c} \bullet \\ \nearrow \bullet \end{array} \left[ \begin{array}{c} \\ \end{array} \right] \quad (D)$$

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$$T_r(i_p, n_p; i_o, n_o) = \left(1 - \frac{n_p - 1}{N}\right) \frac{i_p}{n_p} s T_{r-1}(i_p - 1, n_p - 1; i_o, n_o) \quad \bullet \bullet \left[ \begin{array}{c} \\ \end{array} \right] \quad (rC)$$

$$+ \frac{i_p}{N} s T_{r-1}(i_p, n_p; i_o, n_o) \quad \begin{array}{c} \bullet \\ \nearrow \bullet \end{array} \left[ \begin{array}{c} \\ \end{array} \right] \quad (rD)$$