$$\mathring{n}_1 = -n_1 W + \frac{n_3}{2} + n_3 \, 6 F$$

$$\mathring{n}_1 = 0 \qquad 0 = -n_1 W + \frac{n_3}{2} + n_3 \, 6 F$$

$$n_1 = \frac{1}{W} \frac{1}{2} n_3 (1 + 6 \, 2 F)$$

$$n_1 + n_3 = N$$

$$n_3 + \frac{n_3}{W 2} (1 + 6 \, 2 F) = N \quad \Rightarrow \quad n_3 = N \cdot \frac{W 2}{W 2 + 6 F 2 + 1}$$