\[ Z_N = \frac{\hat{V}_{\text{test}}}{\hat{i}_{\text{test}}} \left| \begin{array}{c} \hat{V} \to 0 \\ \text{will} \\ \text{TEST+D will the output.} \\ \end{array} \right. \]

**Result:**

\[ Z_N = S(L_1+L_2) \frac{(L_1LL_2)D}{1 - S \frac{D^2}{D'^2} \frac{R}{R}} \frac{1 - S \frac{D^2}{D'^2} \frac{L_1}{R}}{1 - S \frac{D^2}{D'^2} \frac{L_1}{R}} \]

**SEPIC**

(for finding control-to-output transfer function)