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$$R_0 := 0 \quad R_X := 100 \quad X := 10 \quad V_R := 5 \quad V_O := 1.25$$

$$\begin{aligned} R_1 &:= R_0 + R_X & R_1 &= 100 \\ R_2 &:= R_0 + R_X + X & R_2 &= 110 \\ R_3 &:= R_0 + R_X & R_3 &= 100 \\ R_4 &:= R_0 + R_X & R_4 &= 100 \end{aligned}$$

$$R_N := \frac{R_1 \cdot R_3}{R_1 + R_3} \quad R_N = 50 \quad R_P := \frac{R_2 \cdot R_4}{R_2 + R_4} \quad R_P = 52.38$$

$$V_N := \frac{R_1 \cdot V_R}{R_1 + R_3} \quad V_N = 2.5 \quad V_P := \frac{R_2 \cdot V_R}{R_2 + R_4} \quad V_P = 2.62$$

$$\begin{aligned} R_2 &:= V_P - V_N & R_2 &= 0.12 \\ R_1 &:= -R_N \cdot V_O & R_1 &= -62.5 \\ R_0 &:= -R_P \cdot R_N \cdot V_O & R_0 &= -3273.81 \end{aligned}$$

$$R_6 := 0$$

$$x := \text{polyroots}(R) \quad x_0 = -47.99 \quad x = \begin{pmatrix} -47.99 \\ 572.99 \end{pmatrix}$$

$$k := \text{Re}(x_0)$$

$$R_6 := \text{ceil}(\text{if}(k < 0, x_1, x_0)) \quad R_6 = 573$$

$$R_5 := R_6 \quad R_5 = 573$$

$$R_{22} := R_1..R_2$$

$$V_0(R_{22}) := \frac{\left(\frac{R_{22} \cdot V_R}{R_{22} + R_4} - V_N \right) \cdot R_6^2}{R_N \cdot R_6 + \frac{R_{22} \cdot R_4}{R_{22} + R_4} \cdot R_N}$$

