



$$V_N = V_{DC}$$

$$V_p = \frac{(1-0)P_1 + R_8}{R_7 + R_8 + P_1} V_{cc} + \frac{0P_1 + R_7}{R_7 + R_8 + P_1} V_{ee}$$

Por CCV $V_p = V_N$
 Si $R_x = R_7 = R_8$, $V_{ee} = -V_{cc}$

$$V_{DC} = \frac{(1-0)P_1 + R_x}{2R_x + P_1} V_{cc} - \frac{0P_1 + R_x}{2R_x + P_1} V_{cc}$$

$$R_x = \frac{(1-20)P_1 V_{cc}}{2V_{DC}} - \frac{P_1}{2}$$

$$V_{DC} = \frac{(1-20)P_1 V_{cc}}{2R_x + P_1}$$

$$V_{DC \text{ MAX}} \Rightarrow 0 = 0\%$$

Posa $V_{DC \text{ MAX}} = 7,5V$

$$(2R_x + 5 \times 10^3) 7,5V = 5 \times 10^3 \Omega \cdot 15V$$

$$R_x = \frac{(5 \times 10^3 \Omega)(15V)}{(2 \cdot 7,5V)} - \frac{5 \times 10^3 \Omega}{2}$$

$$R_x = 2,5 \times 10^3 \Omega$$

Se eligen $R_x = 2,7k\Omega$

$$\therefore R_7 = R_8 = 2,7k\Omega$$