No. 9 - Ramirez Cotoneto Luis Fernando

5 Info.

$R_2 = A = 4380\ \Omega$

$R_4 = B = 2938\ \Omega$

$R_6 = C = 40980\ \Omega$

$R_8 = D = 471,620\ \Omega$

$R_{11} = E = 28350\ \Omega$

$$V_A = \frac{R_2}{R_1 + R_2} V_{cc}$$

$$= \frac{4.38\ k\Omega}{(82 + 4.38)} \times 15\ V$$

$$\boxed{V_A = 0.76\ V}$$

$$V_B = \frac{R_4}{R_3 + R_4} V_{cc}$$

$$= \frac{2.938\ k\Omega}{(56 + 2.938)k\Omega} \times 15$$

$$\boxed{V_B = 0.74\ V}$$

Como V_A esta conectado al no inversor....

$$V_C = \left(1 + \frac{R_6}{R_5}\right) \times V_A$$

$$= \left(1 + \frac{40.98\ k\Omega}{27\ k\Omega}\right) \times 0.76$$

$$\boxed{V_C = 1.913\ V}$$

Ahora, V_C y V_D estan conectados a la terminal INV.

$$V_D = \frac{-R_{11}}{R_9} \times V_C - \frac{R_{11}}{R_D} V_D$$

$$= -\frac{28.35\ k\Omega}{12\ k\Omega} \times 1.913 - \frac{28.35\ k\Omega}{15\ k\Omega} \times (-8.94)$$

$$= -4.519 + 16.8966$$

$$\boxed{V_D = 12.3776\ V}$$