

$$\frac{1.5}{20} = .075$$

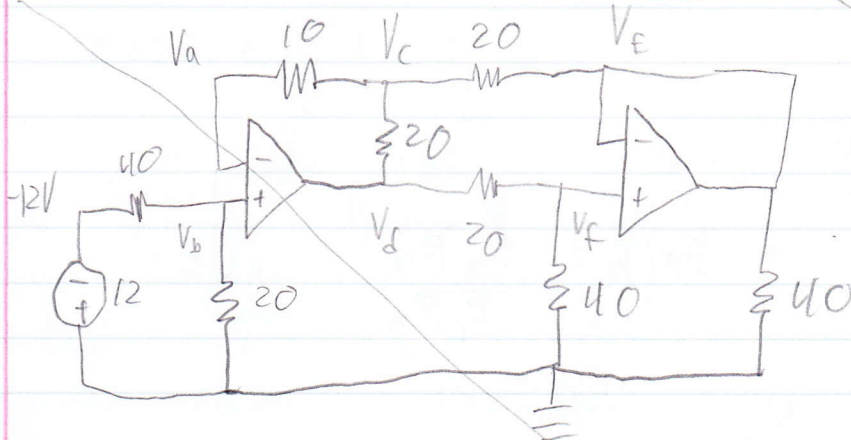
$$\frac{10}{40+10} \cdot 1 = .075$$

$$j = .375$$

$$i_{out} = -0.375 \text{ mA}$$

$$V_{out} = 6V$$

$$40.075 + 8.375 = 6$$



$$V_a - V_b = 0$$

$$V_p - V_f = 0$$

$$\frac{3}{150} V_p - \frac{1}{20} V_d = 0$$

$$3V_p - 2V_d = 0$$

$$V_e = 2V_d \quad V_e = \frac{2}{3}V_d$$

	V_a	V_b	V_c	V_d	V_e	V_f
1	$-\frac{1}{16}$	0	$-\frac{1}{16}$	0	0	0
2	0	$\frac{1}{40} + \frac{1}{20}$	0	0	0	0
3	$-\frac{1}{16}$	0	$\frac{1}{16} + \frac{1}{20} + \frac{1}{20}$	$-\frac{1}{20}$	$-\frac{1}{20}$	0
4	0	0	$-\frac{1}{20}$	$\frac{1}{20} + \frac{1}{20}$	0	$-\frac{1}{20}$
5	0	0	$-\frac{1}{20}$	0	$\frac{1}{20} + \frac{1}{40}$	0
6	0	0	0	$-\frac{1}{20}$	0	$\frac{1}{20} + \frac{1}{40}$

$$\begin{array}{r} C \\ 0 \\ -12 \\ \hline 46 \end{array}$$

$$\begin{aligned} 2V_C - 0.5V_C &= 0 \\ -0.5V_C + \frac{1}{5}V_D &= 0 \\ -0.5V_C + \frac{1}{5}V_D &= 0 \end{aligned}$$