2.(1) $I_o = 0.5A$

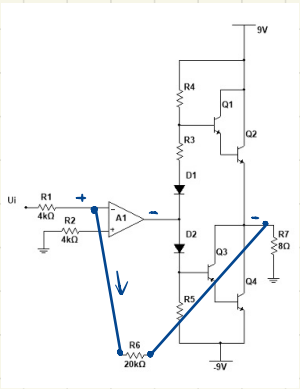
$I_{R1} = \frac{U_{R3}}{R_1} = 24mA$.

$\therefore I_{Zmax} = I_{R1} + I_W = 32mA$.

(3) 消除自激振荡

五.

1.

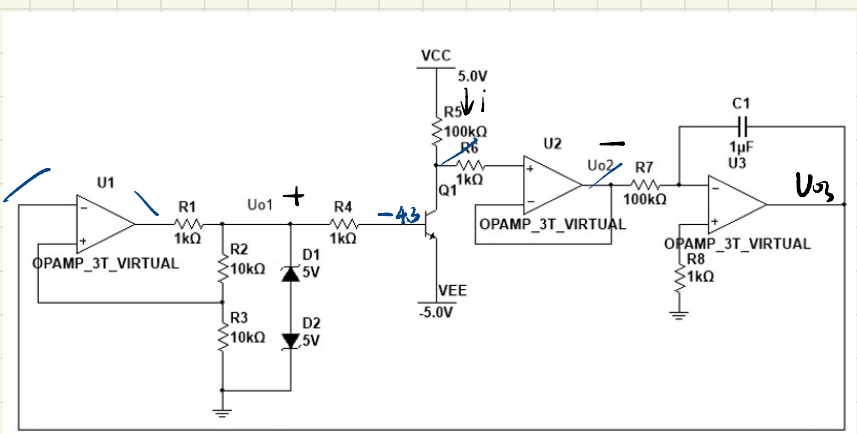



2. 电压并联负反馈 $F = \frac{I_f}{U_o} = -\frac{1}{R_6}$

$A_{uf} = \frac{U_o}{U_i} = \frac{U_o}{I_f R_1} = -\frac{R_6}{R_1}$

3. X. X. ✓ X. ✓ ✓

六.




1. $U_1$: 振荡器! $U_2$: 电压跟随器 $U_3$: 反相求和器

2. $U_1$：矩形波. $U_2$：矩形波

max: 8V　　max: 5V

min: -8V　　min: -5V

3. $U_T = \pm \frac{R_3}{R_3+R_2} U_Z$.　　$U_{o3} = -\frac{1}{R_7 C_1} \int_{-5}^{\uparrow} u_{o2}\, dt$


$$2U_T = \frac{1}{2} \cdot \frac{5}{R_7 C_1}$$

$$T = \frac{4U_T R_7 C_1}{5} = \frac{4}{5} \cdot \frac{R_3}{R_3+R_2} U_Z \cdot R_7 \cdot C_1$$