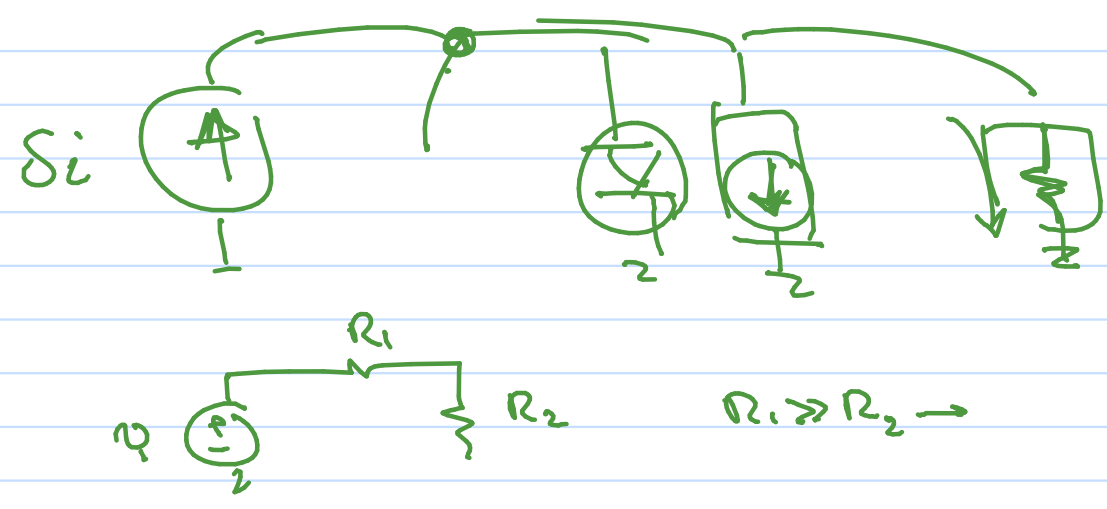
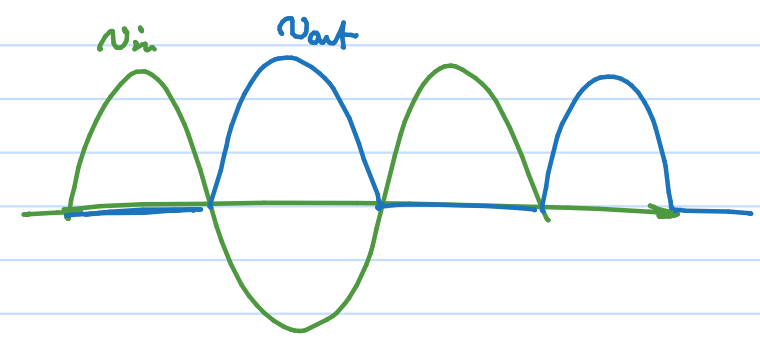
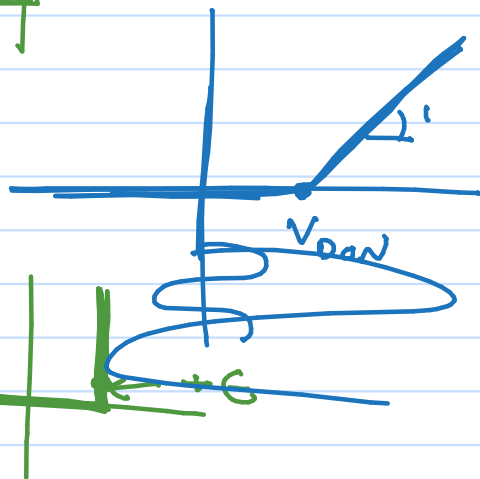
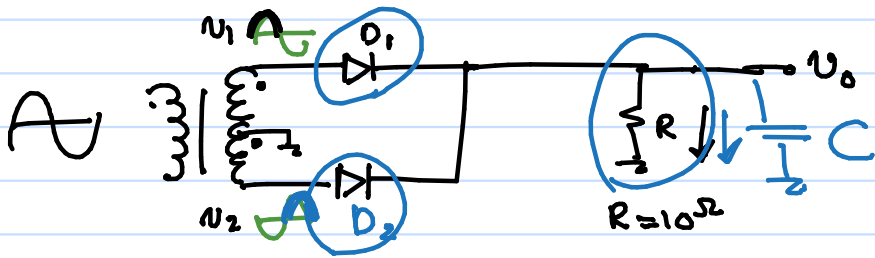
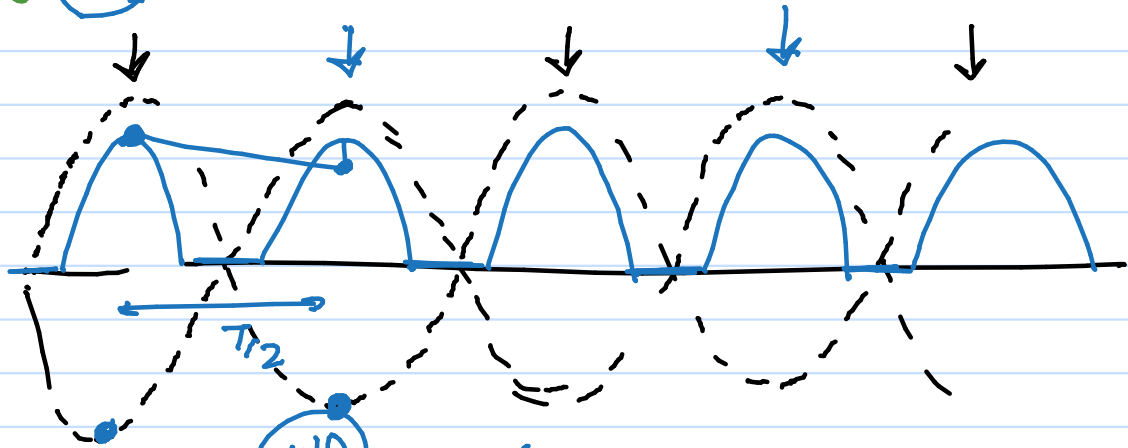


$R_2 = R_1$





$V_{ripple} = 0.5V$



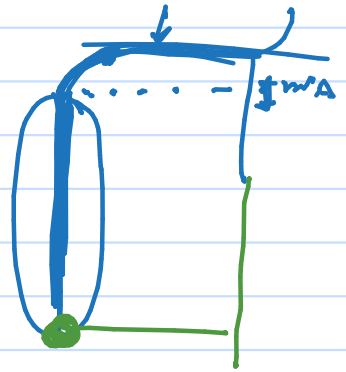
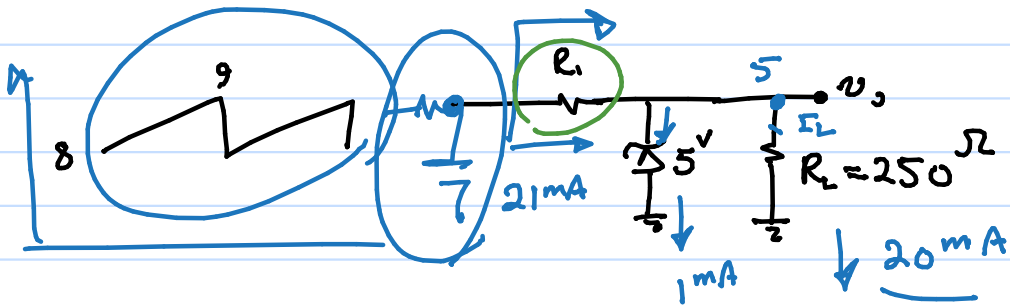
$$V_{ripple} = \frac{V_p - V_{D_{on}}}{2fRC} < 0.5 \rightarrow C > 18 \text{ mF}$$

$\begin{matrix} \text{=10} \\ \text{0.6} \\ \text{50 Hz} \end{matrix}$



عيب  
 ترانس با کم ولت  
 رانده با ۲ برابر توان از سلامت

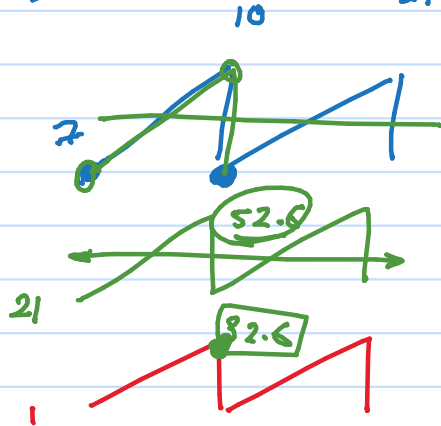
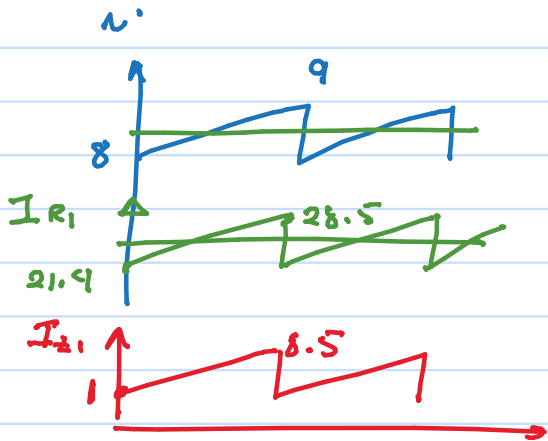
مزایا  
 ۲ ولت کمتر

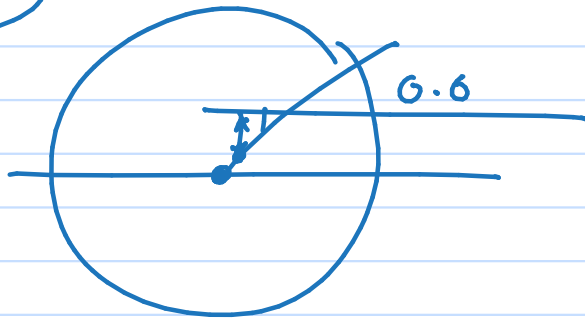
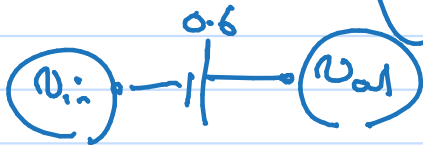
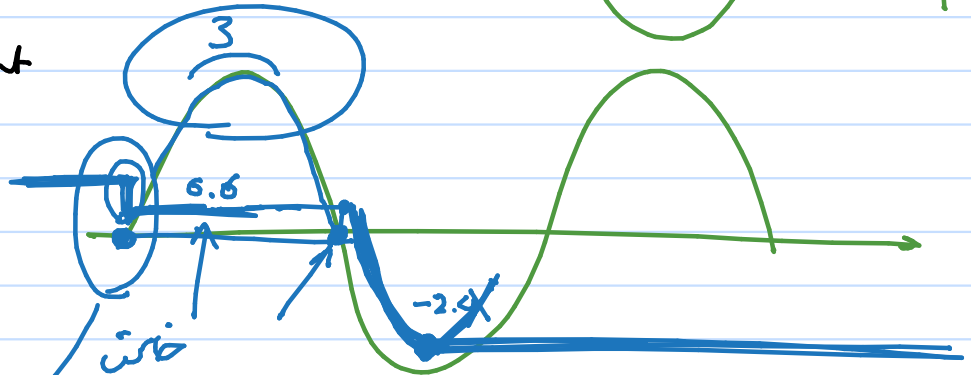
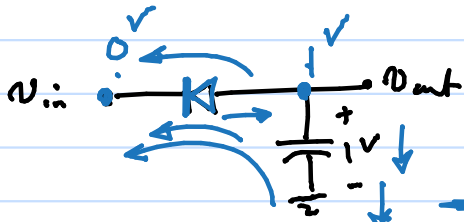
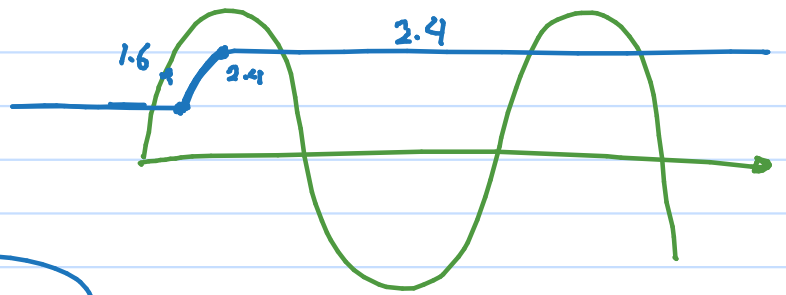
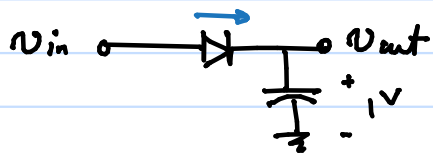


$$R_1 < \frac{8-5}{21mA} = 142.8 \Omega$$

$$R_1 = 140 \Omega \rightarrow 120 \Omega$$

$$R < \frac{7-5}{21mA} = 95 \Omega$$





$t > 0$

