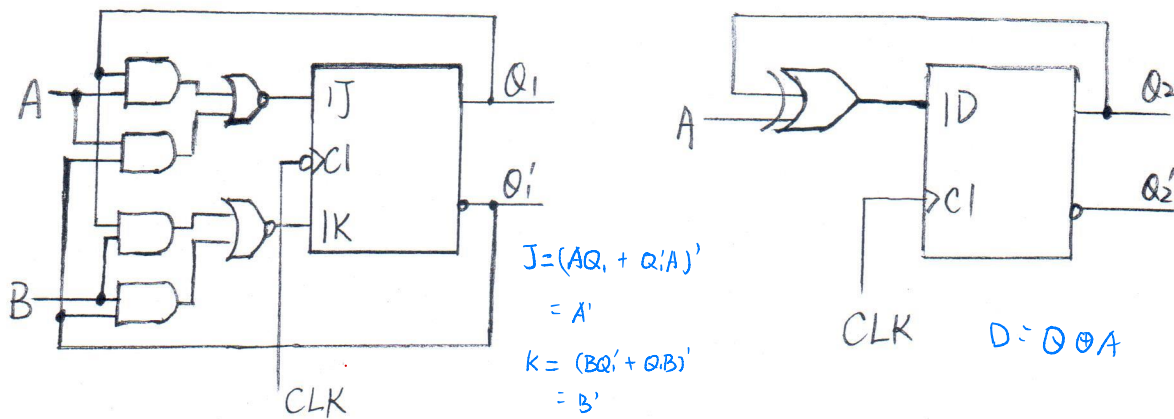


第五章 考试难度相当练习



1. 分别画出图1(a)、图1(b)所示电路的工作波形, 其输入波形如图1(c)所示



$$Q_1^* = JQ_1' + KQ_1$$

$$= A'Q_1' + BQ_1$$

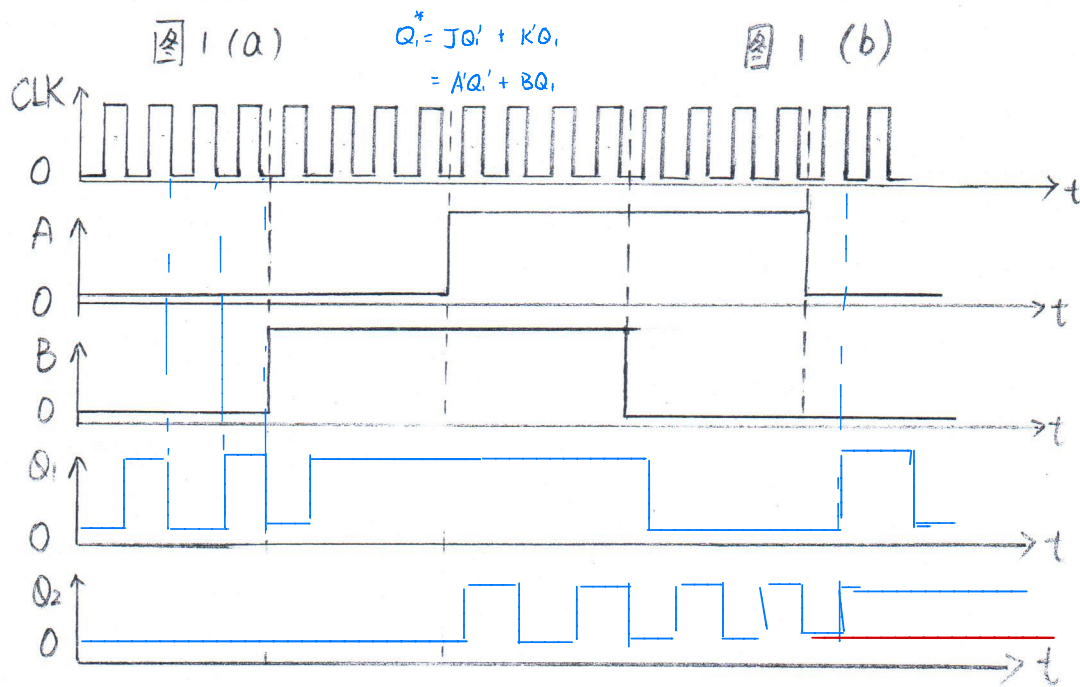


图1(c)

2. 画出图2所示电路输出 V_0 的波形 (设初态 $V_0 = 0$)

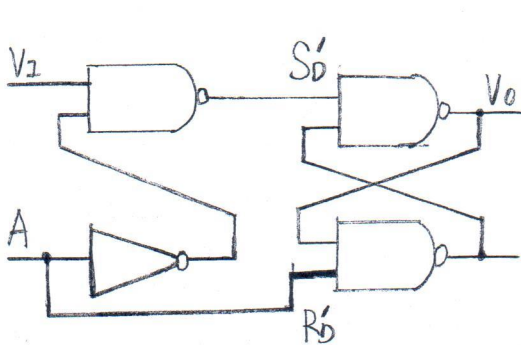
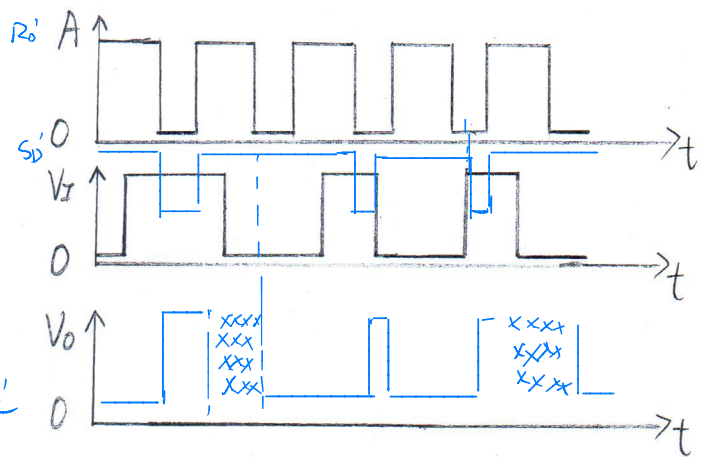


图2

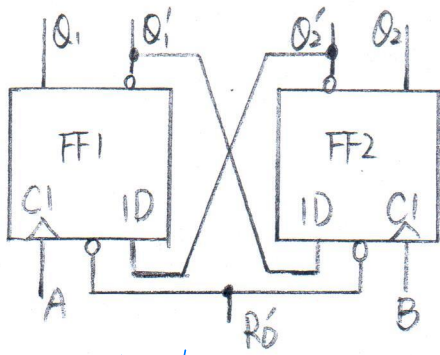
$$S_0' = (A'V_1)' = A + V_1'$$

$$R_0' = A$$



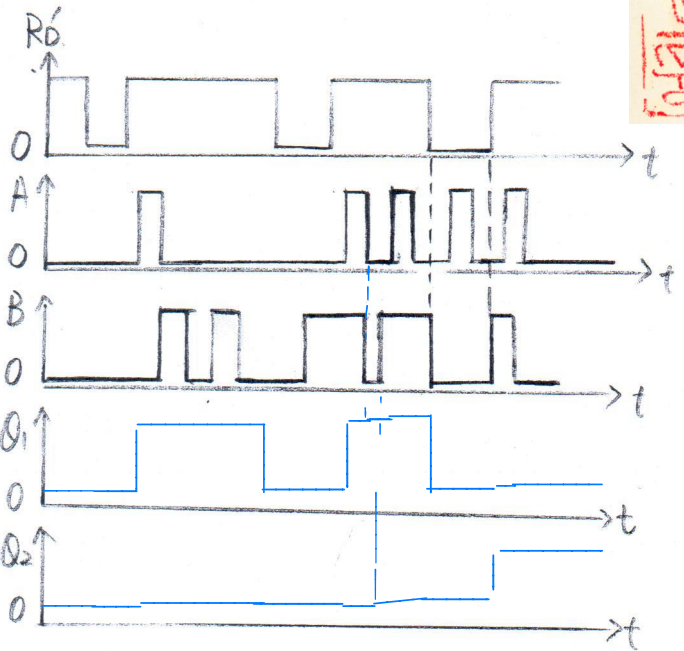


3. 画出图3所示电路中 Q_1, Q_2 的波形



$D_1 = Q_2'$
 $D_2 = Q_1'$

图3



4. 画出图4所示电路中 Q_2 的波形

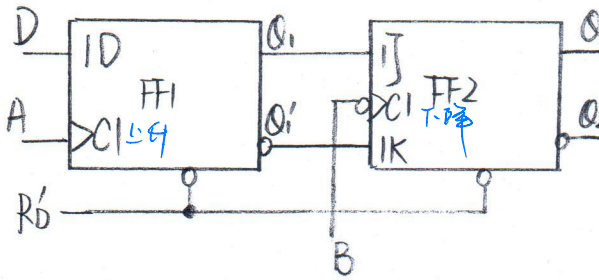
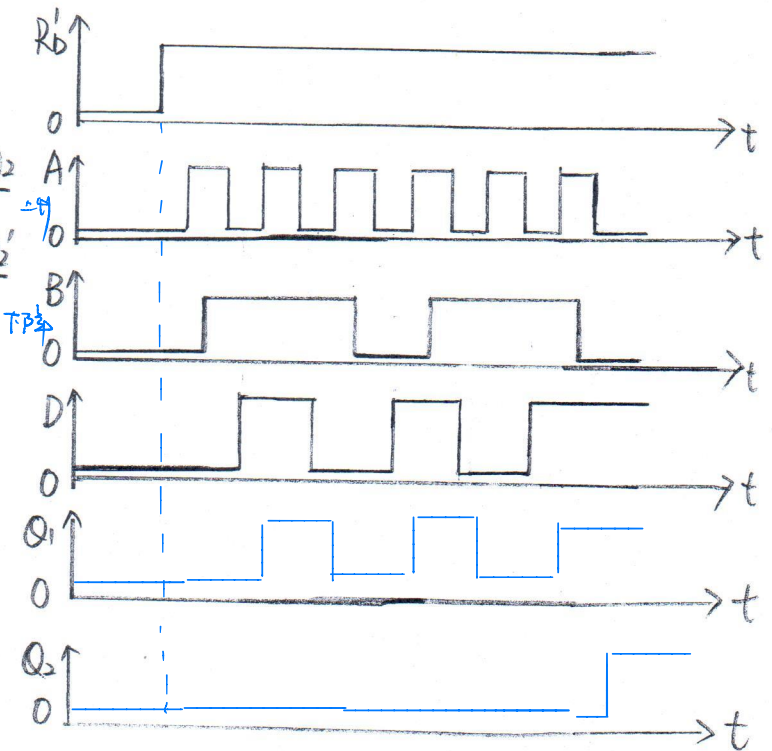
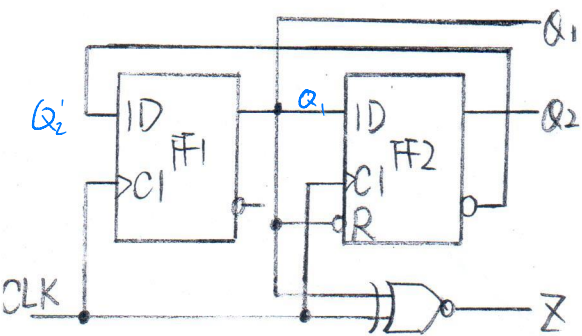


图4



5. 试画出图5所示电路中 Q_1, Q_2, Z 的波形。

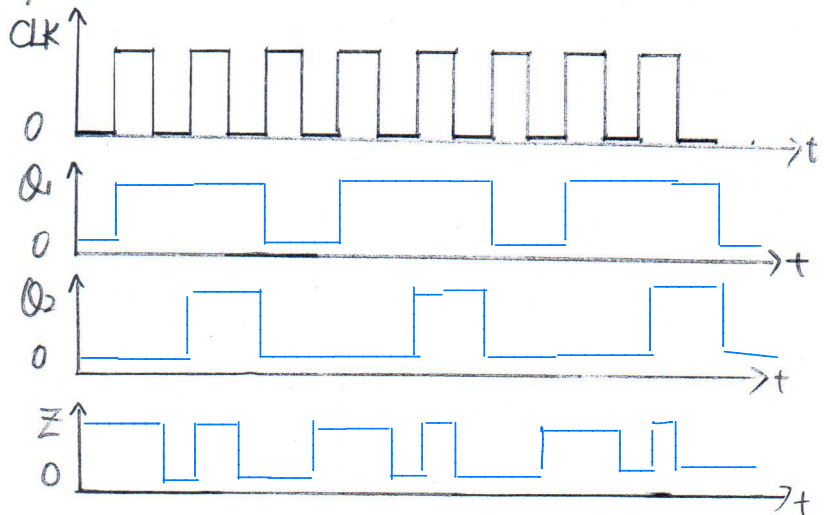
设触发器初态皆为0。

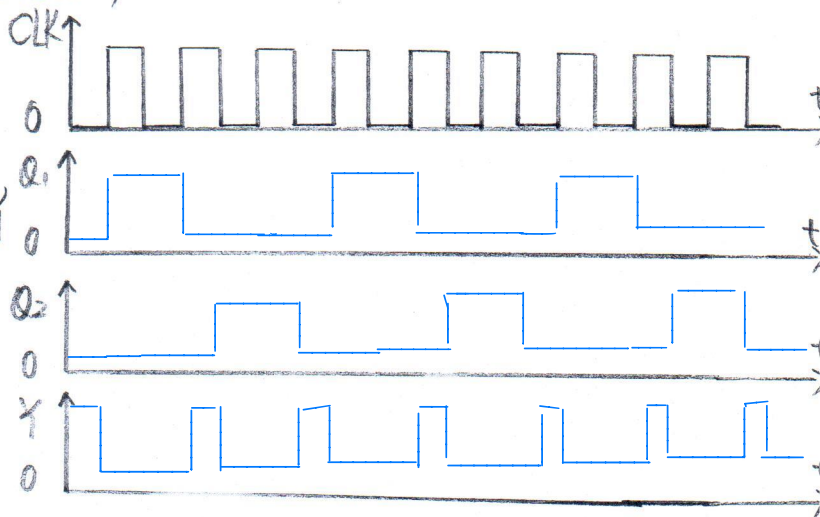
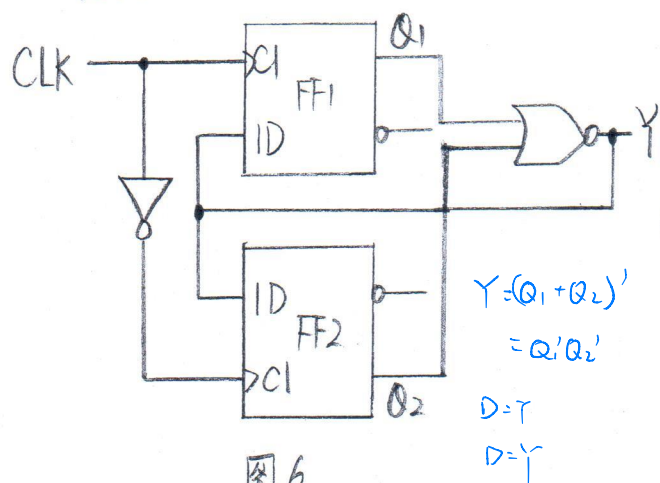
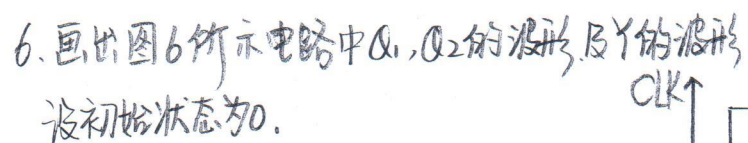


$Q_1^* = Q_2'$ 图5

$Q_2^* = Q_1$

$Z = Q_1 \odot CLK$





卷六

7. 画出图7所示电路中输出 V_o 的波形, 设初态为0, 并设异或门的延迟为 t_1 , 触发器延迟为 t_2 。

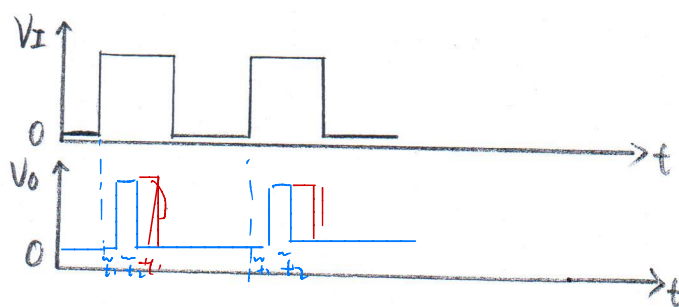
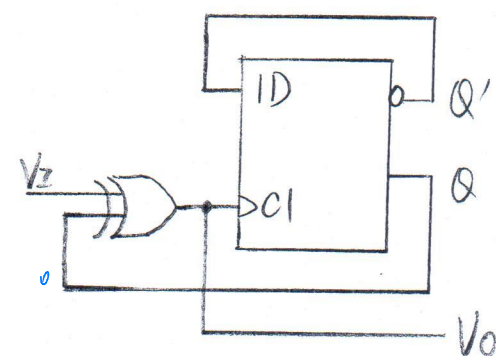


图7

$$D = Q'$$

$$Q^* = Q'$$