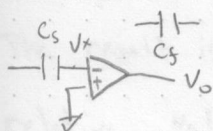


6) Calculate V_o at $t = t_{end}$

$A_{ol} = \infty$ switches ideal

Cases:	S_2	S_4	S_{13}	S_{14}	S_{23}	S_{12+}
0	0	0	0	0	0	0
1	0	0	1	1	0	1
2	0	0	0	0	0	0
3	1	0	0	0	1	1
4	0	0	0	0	0	0
5	0	0	1	0	1	0
6	0	0	0	0	0	0
7	0	1	0	1	0	1

Circuit 0, 2, 4, 6



$$Q = V \cdot C$$

$$V_f = V(C_f)$$

$$V_s = V(C_s)$$

$$Q_f = V_f \cdot C_f$$

$$Q_s = V_s \cdot C_s$$

Case 1

$$V_i = 1V$$

$$V_x = 0V$$

$$V_f = 0$$

$$V_s = V_i - V_x = V_i$$

$$Q_f = 0$$

$$Q_{s1} = V_i \cdot C_s$$

Case 3

$$Q_{f1} = 0$$

$$Q_{s1} = V_i \cdot C_s$$

$$V_x \Rightarrow 0$$

$$Q_{f3} = Q_{s1} = V_i \cdot C_s$$

Circuit 3

