

Tutorial-7

Winter 2024

Basic Electronics (ECE113)

Q1: For the given circuit (Figure-1), if $V_{in} = V_m \sin wt$ then analyse the following things:

1. Draw V_o vs t
2. Draw V_o vs V_{in}

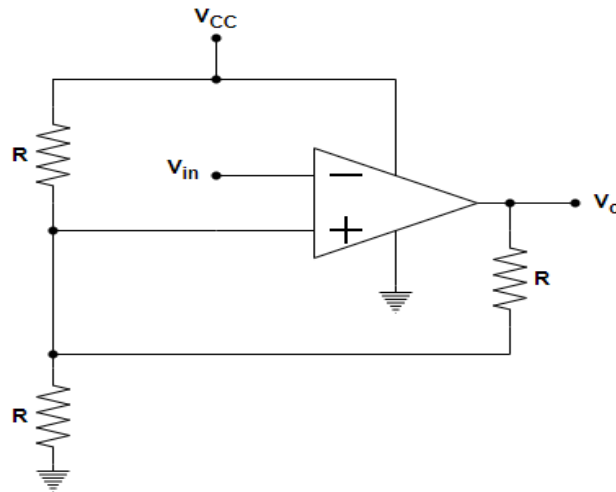


Figure 1

Q2: In Figure-2, find out the output voltage (V_o).

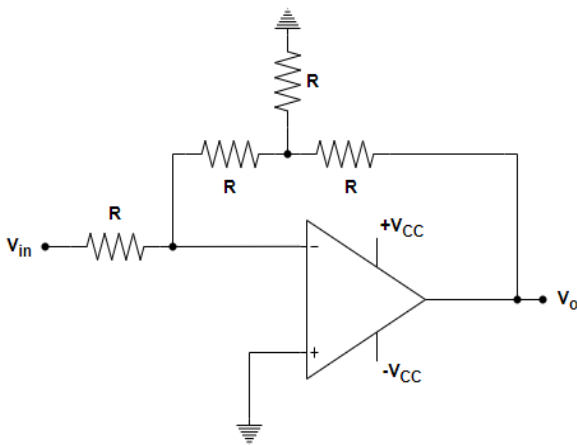


Figure 2

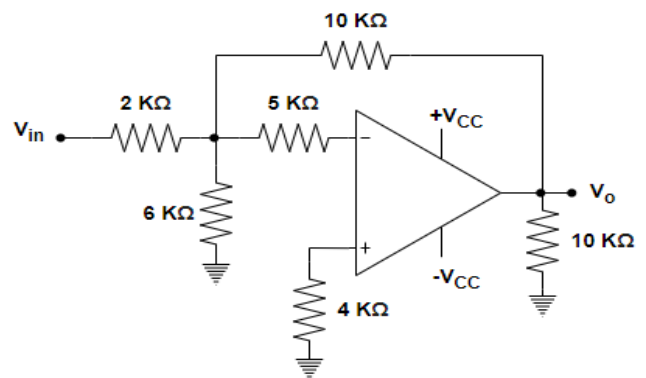


Figure 3

Q3: In Figure-3, find the output voltage (V_o).

Q4: Find outputs (V_o) in Figure-4, for different given possible combination of inputs in Table-1 (if $V_{cc} = 15V$):

V_{in1}	V_{in2}
0 V	0 V
0 V	1 V
1 V	0 V
1 V	1 V

Table 1

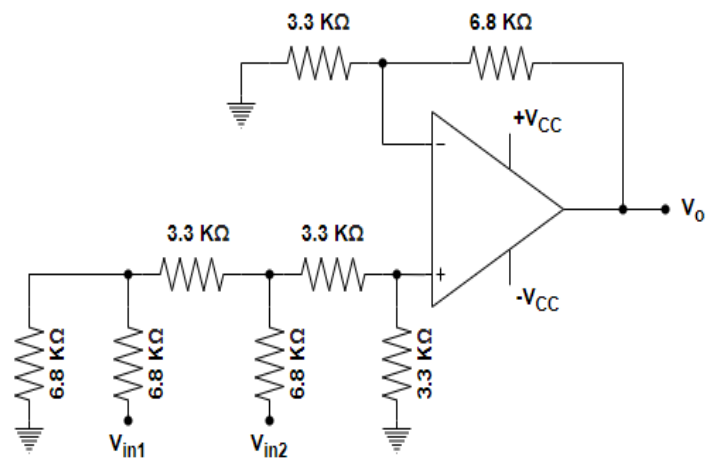


Figure 4