

Assignment 3 (All questions carry equal weightage)

1. In Fig.(1), the ideal opamp is used. The output voltage is $V_o =$ _____.

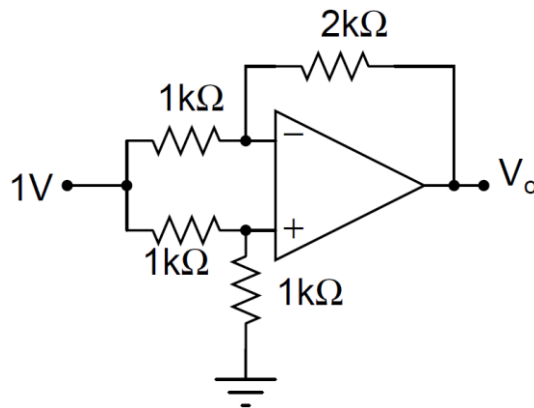


Fig.(1)

2. The input resistance of the circuit shown in Fig.(2), assuming the op-amp to be ideal is: _____.

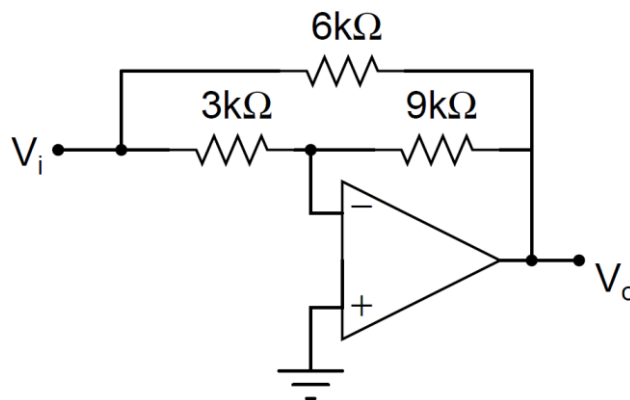


Fig.(2)

3. Assuming $V_{BE} = 0.7V$ and $\beta = 99$ of the transistor Q, the output voltage V_o in the ideal opamp circuit shown in Fig.(3) is _____.

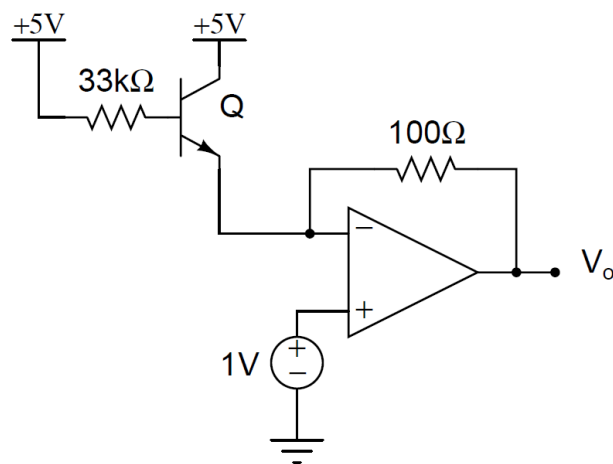


Fig.(3)

General Instructions: Solve the problems after reading the questions very carefully. Few problems consume much more thinking and time. You must show all the calculations and explanations.

Best wishes.....