

Quiz I set B  
BRAC University  
Semester: Spring 2024

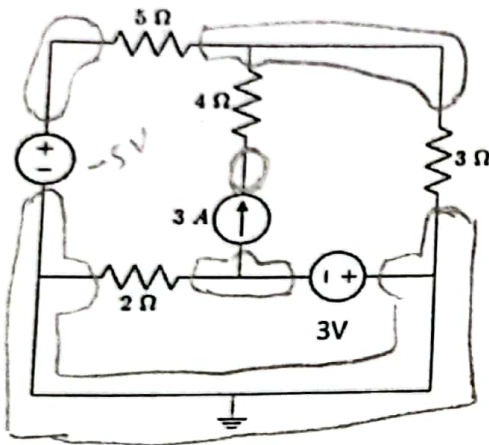
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Course No: CSE251  
Course Title: Electronic Devices and Circuits  
Faculty: AGS

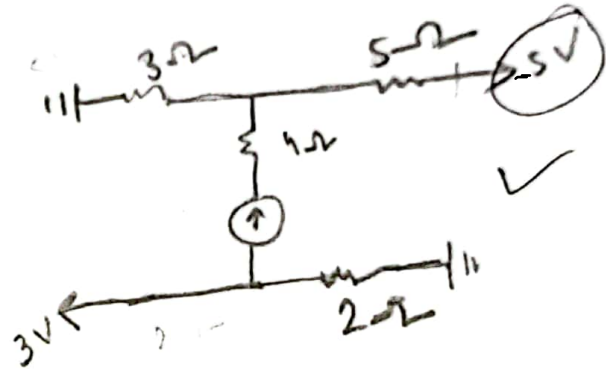
Marks: 15  
Time: 20 minutes

1. Draw the alternate representation of the following circuit. (CO1)

[5]



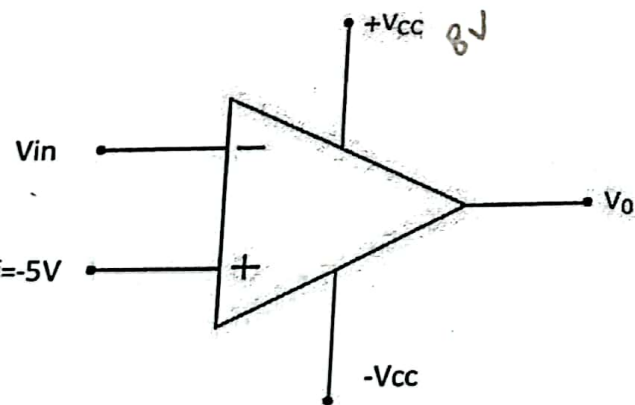
Ans:



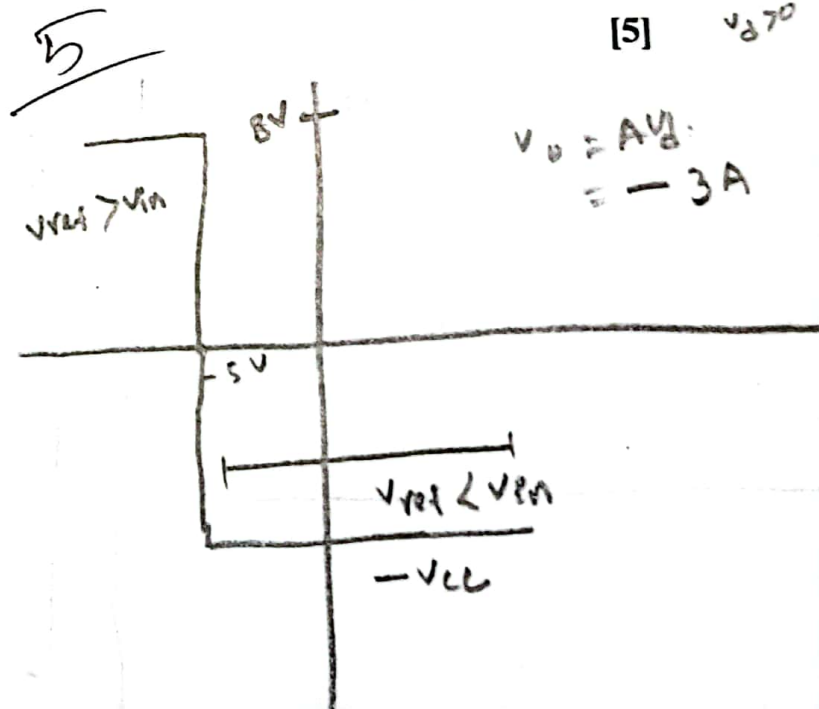
2. Draw the Voltage Transfer Characteristics (VTC) of the following Op-Amp (CO1)  
where  $+V_{cc} = 8V$  [Hint: Draw  $V_0$  vs  $V_{in}$ ]

What is the value of  $V_0$  if  $V_{in} = -2V$

[5]



$V_{in} = -2V$   
 $V_0 = -V_{cc}$

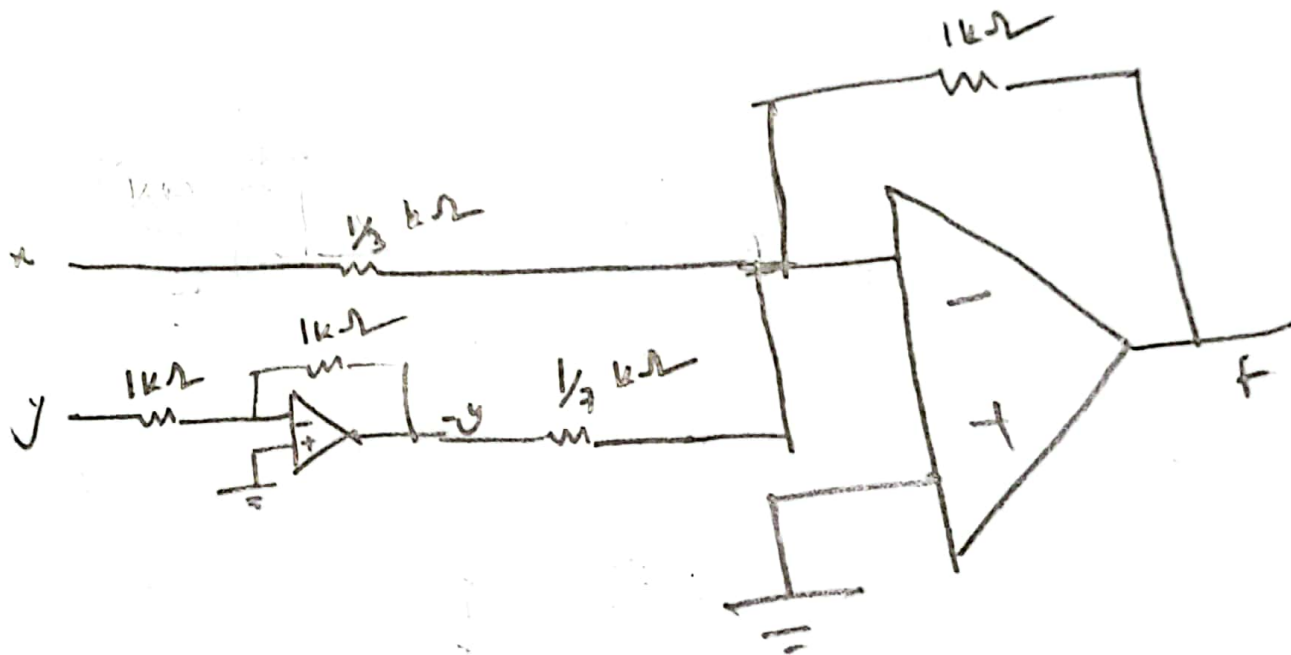


3. Implement the following function using inverting op-amps: (CO3)

[5]

$$f = -(3x - 7y)$$

[Hint: Inverting Summer/Adder]



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