



# LAB-2

Name Surname

Number

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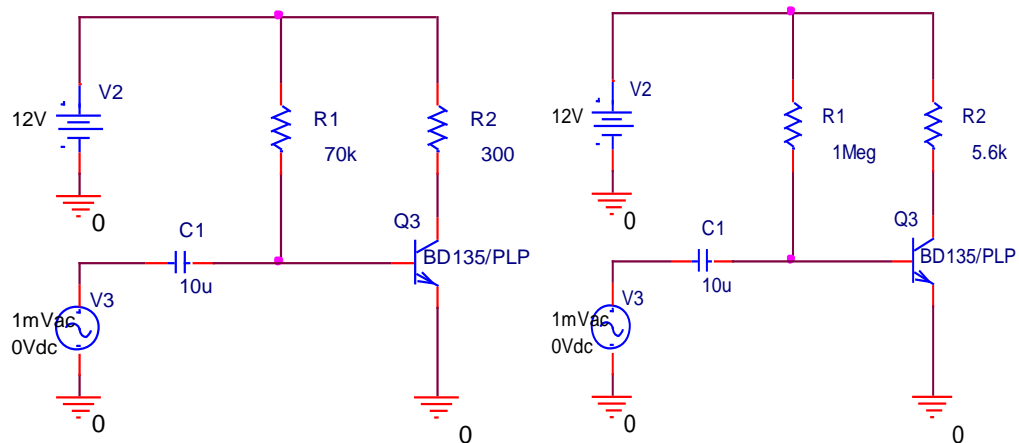
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**Objective:** Obtain the common emitter amplifier high frequency response, draw the bode plots.

**Important Note:** Check that your cables are working properly before starting each experiment.

1.

Implement the following common emitter amplifier. Use a voltage divider in the front to get the small signal. Then, measure the gain ( $V_{out}/V_{in}$ ) for the frequencies in the table.



Frequency (Hz)	Gain ( $V_{out}/V_{in}$ )	
1k		
10k		
20k		
30k		
50k		
70k		
100k		
150k		
200k		
500k		
700k		
1M		
2M		

Conclusion:

From your measurements, find the -3dB frequencies, and draw the bode plot for the amplitude gain only. Evaluate  $C_{je}$  and  $C_{jc}$ . What is the difference between the two circuits?