1. Calculate the feedback fraction in the figure.



A) 20
B) 0.05
C) 0.5
D) 5

**2.)** For the CC amplifier shown in the figure, solve for A:



A) 0.566
B) 0.998
C) 2.40
D) 570

1. For the circuit shown in the figure, solve for the AV:



A) 7.5
B) 4.0
C) 3.75
D) 15.4

**4.)** For the regulator shown in the figure, let VBE = 0.7 V and determine Vout(max).



A) 18.9V
B) 9.45V
C) 12.6V
D) 10.4V

**5.)** For the regulator shown in the figure, let 0.7 V and determine the shorted load current, ISL.



A) 230uA
B) 700uA
C) 259mA
D) 853uA

**6.)** In the figure, the transistors are identical with βdc = 300. Use the second approximation of a diode to determine Zin.


A) 44.3Ω
B) 13.3kΩ
C) 4.7kΩ
D) 26.6kΩ

**7.)** In the figure, the transistors are identical with βdc = 300. Use the second approximation of a diode to determine VB.



A) 0V
B) 0.7V
C) 1.4V
D) -6V

**8.)** An OP Amp has a slew rate of .5V/us. What is the highest frequency you can amplify without slew rate distortion if you desire a peak output of 6 volts?

A) .01326 Hz
B) 13.26 KHz
C) 10 KHz
D) 1 Mhz