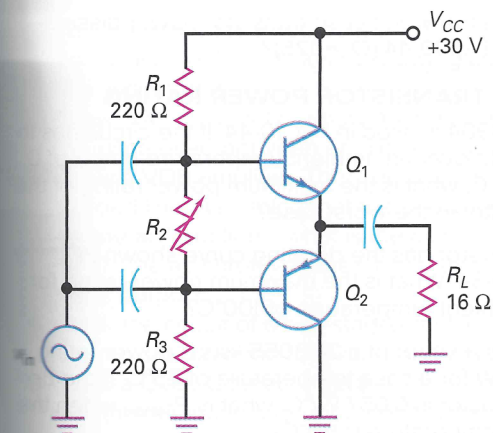


Figure 10-41



- 10-24 What is the maximum power dissipation of each transistor of Fig. 10-41?
- 10-25 What is the maximum output power in Fig. 10-41?
- 10-26 What is the quiescent collector current in Fig. 10-42?
- 10-27 In Fig. 10-42, what is the maximum efficiency of the amplifier?

Figure 10-42

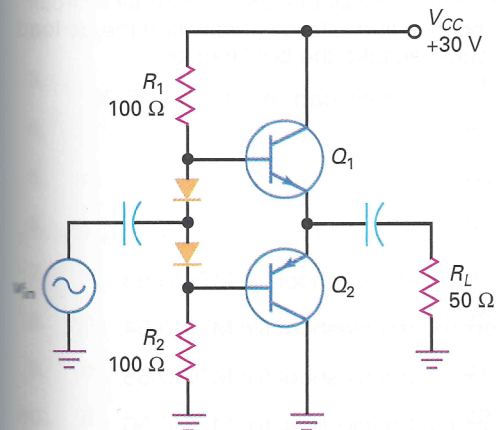
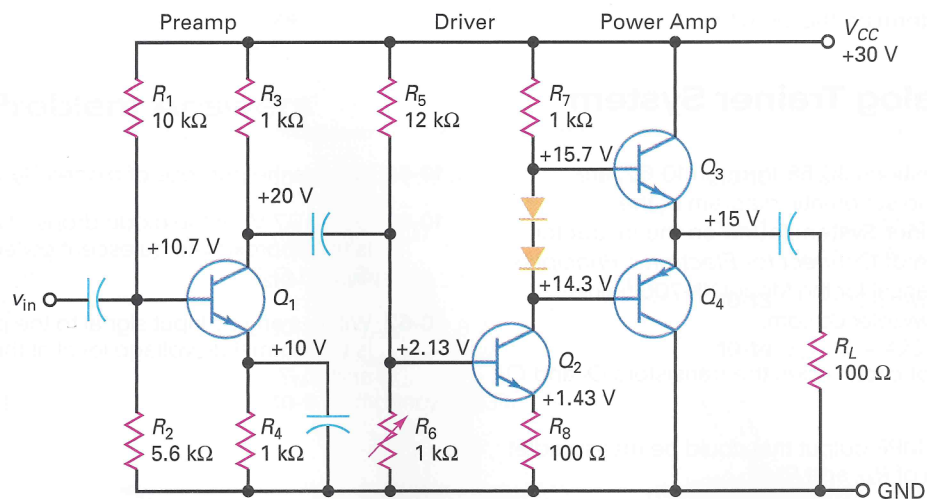


Figure 10-43



- 10-28 If the biasing resistors of Fig. 10-42 are changed to $1\text{ k}\Omega$, what is the quiescent collector current? The efficiency of the amplifier?

SEC. 10-7 CLASS-B/AB DRIVERS

- 10-29 What is the maximum output power in Fig. 10-43?
- 10-30 In Fig. 10-43, what is the voltage gain of the preamp stage if $\beta = 200$?
- 10-31 If Q_3 and Q_4 have current gains of 200 in Fig. 10-43, what is the voltage gain of the driver stage?
- 10-32 What is the quiescent collector current in Fig. 10-43 of the power output stage?
- 10-33 What is the overall voltage gain for the three-stage amplifier in Fig. 10-43?

SEC. 10-8 CLASS-C OPERATION

- 10-34 **Multisim** If the input voltage equals 5 V_{rms} in Fig. 10-44, what is the peak-to-peak input voltage? If the dc voltage between the base and ground is measured, what will a DMM indicate?
- 10-35 **Multisim** What is the resonant frequency in Fig. 10-44?
- 10-36 **Multisim** If the inductance is doubled in Fig. 10-44, what is the resonant frequency?
- 10-37 **Multisim** What is the resonance in Fig. 10-44 if the capacitance C_3 is changed to 100 pF ?

SEC. 10-9 CLASS-C FORMULAS

- 10-38 If the Class-C amplifier of Fig. 10-44 has an output power of 11 mW and an input power of $50\text{ }\mu\text{W}$, what is the power gain?
- 10-39 What is the output power in Fig. 10-44 if the output voltage is $50\text{ V}_{\text{p-p}}$?
- 10-40 What is the maximum ac output power in Fig. 10-44?
- 10-41 If the current drain in Fig. 10-44 is 0.5 mA , what is the dc input power?
- 10-42 What is the efficiency of Fig. 10-44 if the current drain is 0.4 mA and the output voltage is $30\text{ V}_{\text{p-p}}$?