1. Tipler 28-62.

2. Tipler 28-66.

3. Tipler 28-75.

4. (Horowitz & Hill Additional Exercise 1-7) Sketch the output for the circuit shown below.
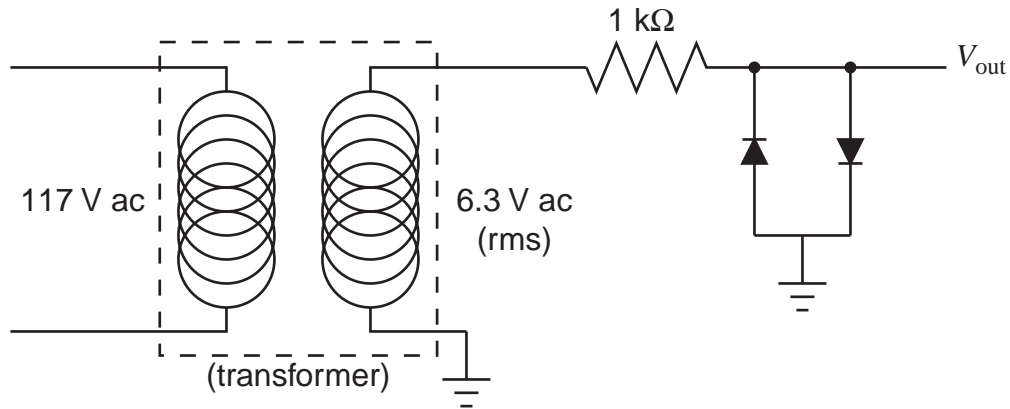
5. For the *pnp*-transistor amplifier shown below, suppose $R_b = 2$ kΩ and $R_L = 10$ kΩ. Suppose further that 10 μA ac base current generates a 0.5 mA ac collector current. What is the voltage gain of the amplifier?