

- 22** A main transformer has a primary coil of 2500 turns and a secondary coil of 130 turns. The primary coil is connected to a main supply where  $V_{\text{rms}}$  is 230 V. The secondary coil is connected to a lamp of resistance  $6.0 \Omega$ . The transformer is 100% efficient.

What is the peak power dissipated by the lamp?

**A** 12 W

**B** 24 W

**C** 48 W

**D** 96 W