

- 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