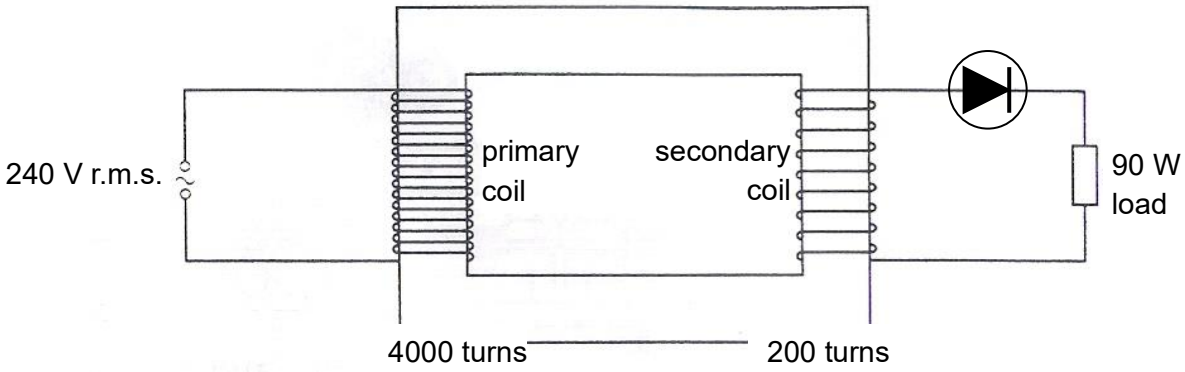
28 The diagram shows an iron-cored transformer assumed to be 100% efficient. The primary coil of the transformer has 4000 turns and is connected to a 240 V r.m.s. supply. The secondary coil has 200 turns and is connected, through an ideal diode, to a resistive load which is dissipating energy at a mean rate of 90 W.



What is the r.m.s. current in the secondary coil.

A 0.375 A **B** 0.750 A **C** 7.50 A **D** 10.6 A