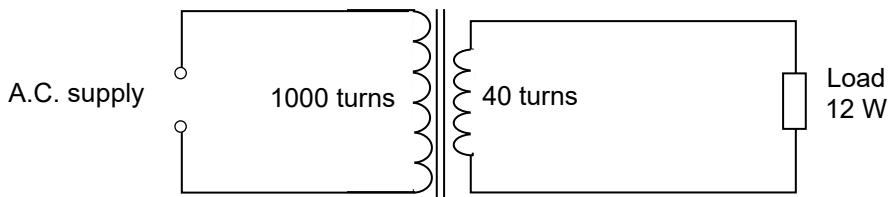


- 28** The primary coil of an ideal transformer has 1000 turns and is connected to an A.C. supply. The secondary coil has 40 turns and is connected to a load which has a power rating of 12 W.



If the root-mean-square (r.m.s) voltage across the load is 6.5 V, what is the r.m.s current in the primary coil?

A 0.026 A

B 0.074 A

C 0.10 A

D 0.15 A