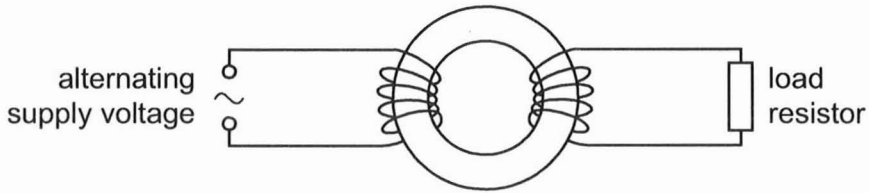
33 An alternating supply voltage is connected across the primary coil of an ideal iron-cored transformer.

The secondary coil has 600 turns and is connected across a load resistor output. The r.m.s. potential difference of the output is 9.0 V.



The r.m.s. current is 250 mA in the primary coil and 750 mA in the secondary coil.

What are the number of turns on the primary coil and the r.m.s. voltage of the supply?

	number of turns on primary coil	r.m.s. voltage of the supply / V
A	200	3.0
B	200	27
C	1800	3.0
D	1800	27