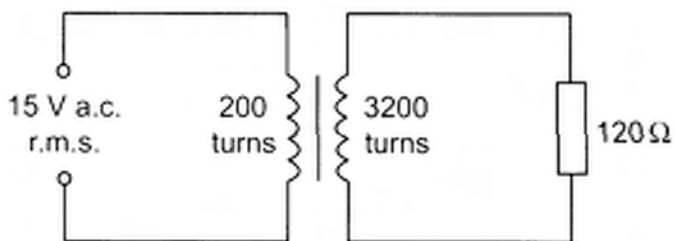


- 33 The primary of an ideal transformer has 200 turns and is connected to a 15 V root-mean-square (r.m.s.) supply. The secondary has 3200 turns and is connected to a resistor of resistance $120\ \Omega$, as shown in the diagram.



What are possible values of the secondary voltage, the secondary current and the mean power dissipated in the resistor?

	secondary voltage /V r.m.s.	secondary current /A r.m.s.	resistor power /W
A	24	0.020	4.8
B	24	0.20	48
C	240	0.50	120
D	240	2.0	480