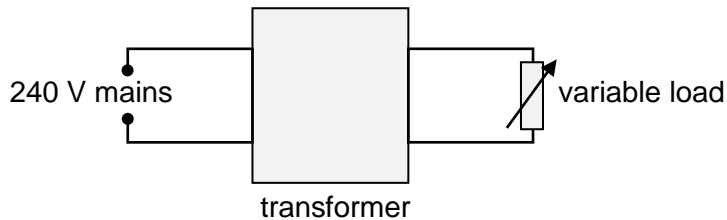


- 27** An ideal transformer steps down the 240 V sinusoidal voltage from the mains to 12 V, which is then applied to a variable load.



What is the change in the current supplied by the mains when the resistance of the load is increased from $20\ \Omega$ to $50\ \Omega$?

- A** Decrease from 30 mA to 12 mA.
- B** Increase from 12 mA to 30 mA.
- C** Decrease from 12 mA to 4.8 mA.
- D** Increase from 0.24 A to 0.60 A.