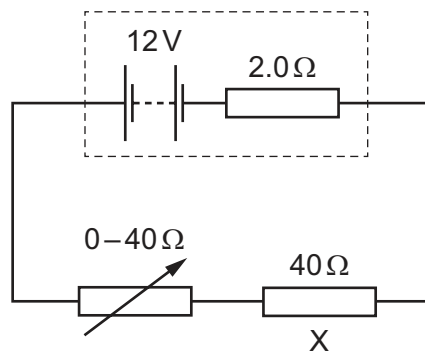


- 35** A resistor X of resistance $40\ \Omega$ and a variable resistor are connected to a battery of electromotive force (e.m.f.) 12 V and internal resistance $2.0\ \Omega$, as shown.



The resistance of the variable resistor is changed from 0 to $40\ \Omega$.

What is the change in power dissipated in resistor X?

- A** 2.4 W **B** 2.7 W **C** 3.6 W **D** 5.6 W