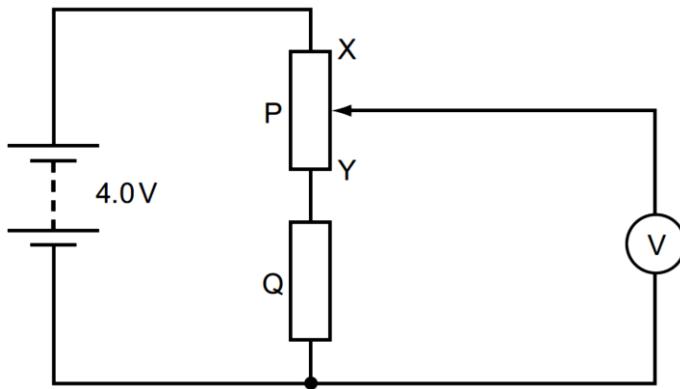
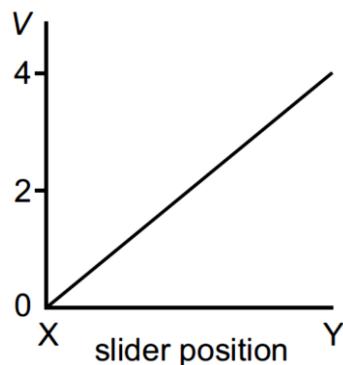


- 21** In the circuit below, P is a potentiometer of total resistance  $10\ \Omega$  and Q is a fixed resistor of resistance  $10\ \Omega$ . The battery has an e.m.f. of  $4.0\text{ V}$  and negligible internal resistance. The voltmeter has a very high resistance. The slider on the potentiometer is moved from X to Y and a graph of voltmeter reading V is plotted against slider position.

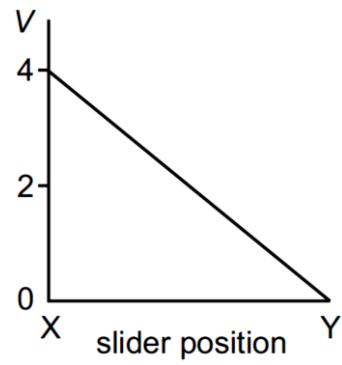


Which of the following shows the correct graph obtained?

**A**



**B**



**C**

**D**

