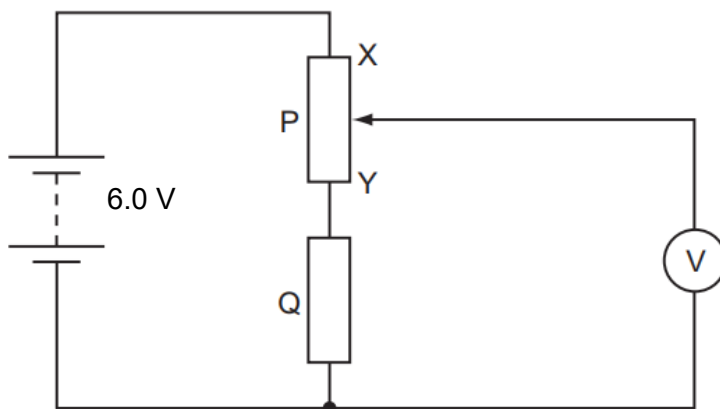
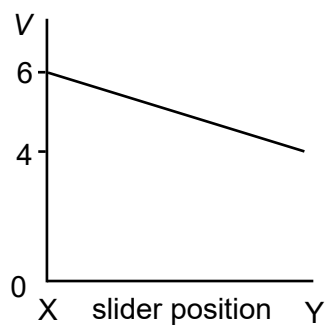


- 23** In the circuit below, P is a potentiometer of total resistance  $10\ \Omega$  and Q is a fixed resistor of resistance of  $20\ \Omega$ . The battery has an e.m.f. of  $6.0\ \text{V}$  and negligible internal resistance. The voltmeter has a very high resistance. The slider on the potentiometer is moved from X to Y and a graph of voltmeter reading  $V$  is plotted against slider position.

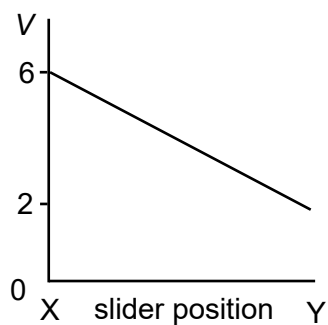


Which graph is obtained?

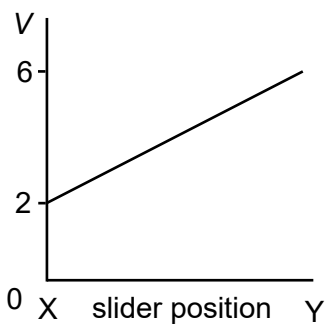
**A**



**B**



**C**



**D**

