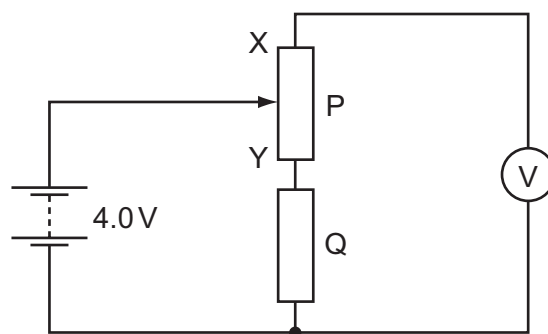
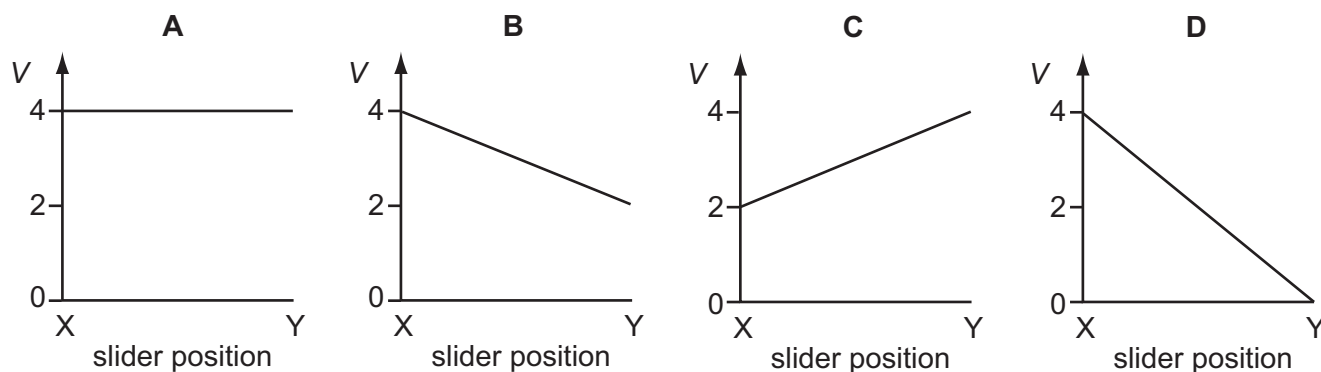


- 36 In the circuit below, P is a potentiometer of total resistance  $10\Omega$  and Q is a fixed resistor of resistance  $10\Omega$ . The battery has an electromotive force (e.m.f.) of  $4.0\text{V}$  and negligible internal resistance. The voltmeter has a very high resistance.



The slider on the potentiometer is moved from X to Y and a graph of voltmeter reading  $V$  is plotted against slider position.

Which graph would be obtained?



**Space for working**