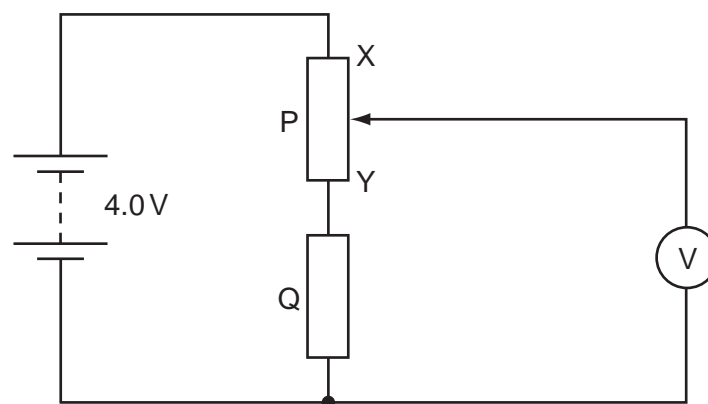
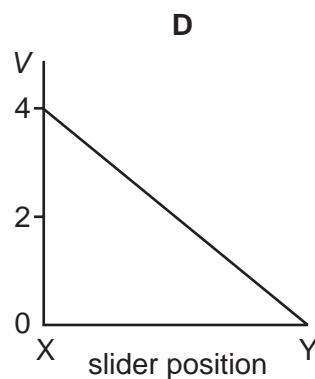
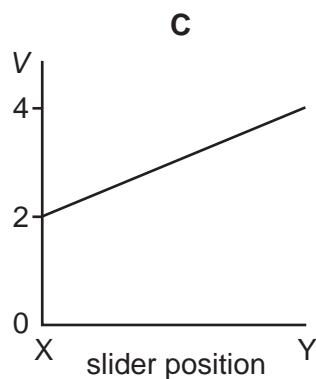
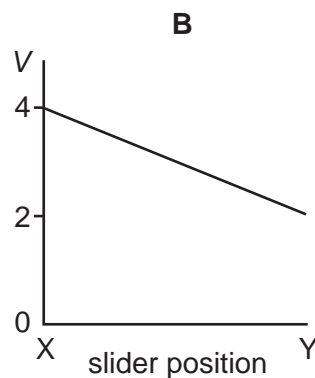
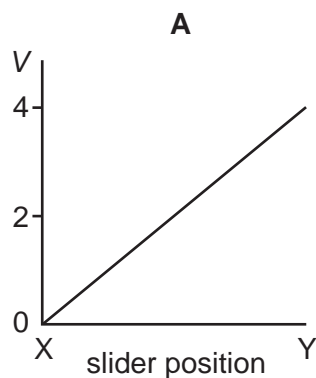


- 37** In the circuit below, P is a potentiometer of total resistance $10\ \Omega$ and Q is a fixed resistor of resistance $10\ \Omega$. The battery has an e.m.f. of $4.0\ \text{V}$ and negligible internal resistance. The voltmeter has a very high resistance. The slider on the potentiometer is moved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



Which graph is obtained?



- 38** Which two nuclei contain the same number of neutrons?