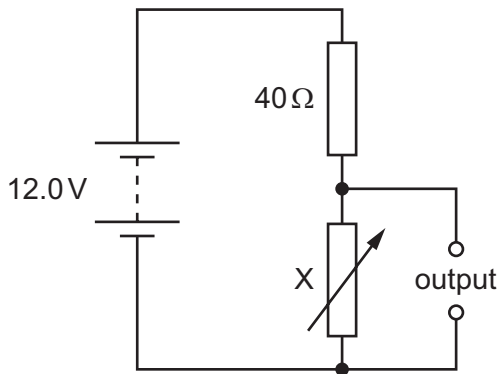


- 38** In the circuit shown, X is a variable resistor whose resistance can be changed from $5.0\,\Omega$ to $500\,\Omega$. The electromotive force (e.m.f.) of the battery is $12.0\,\text{V}$. It has negligible internal resistance.



What is the maximum range of values of potential difference across the output?

- A** 1.3V to 11.1V
- B** 1.3V to 12.0V
- C** 1.5V to 11.1V
- D** 1.5V to 12.0V