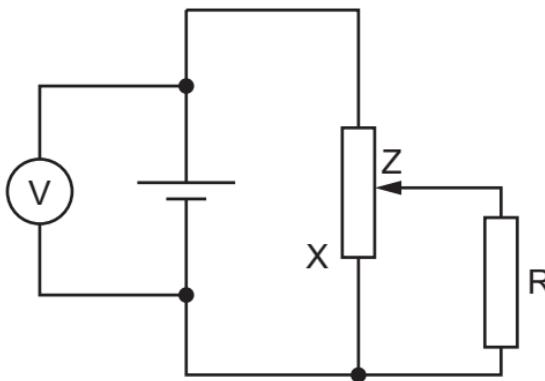


- 36 A cell of constant electromotive force (e.m.f.) but with internal resistance is connected to a fixed resistor R using a potentiometer. A voltmeter measures the potential difference (p.d.) between the terminals of the cell.



Which statement explains the change to the reading of the voltmeter as contact Z is moved towards end X of the potentiometer?

- A The voltmeter reading decreases because the current through the cell decreases.
- B The voltmeter reading decreases because the current through the cell increases.
- C The voltmeter reading increases because the current through the cell decreases.
- D The voltmeter reading increases because the current through the cell increases.