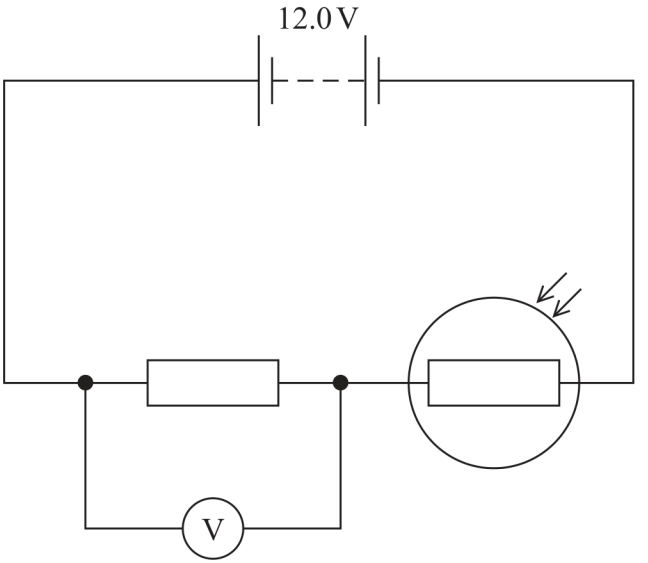
10 The circuit shows a potential divider, including a battery of negligible internal resistance and a light dependent resistor (LDR). The potential difference (p.d.) across the fixed resistor is measured using a voltmeter.



Which of the following statements about this circuit is correct?

- ☒ **A** If the resistance of the LDR halves, the voltmeter reading halves.
- ☒ **B** Increasing the light intensity would decrease the voltmeter reading.
- ☒ **C** Increasing the light intensity would have no effect on the voltmeter reading.
- ☒ **D** The voltmeter reading added to the p.d. across the LDR will always be 12.0 V.

(Total for Question 10 = 1 mark)