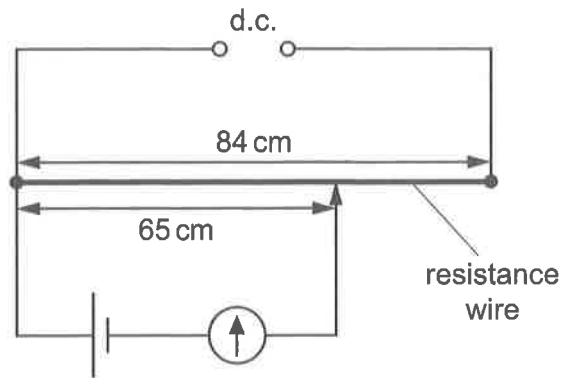


- 22** A resistance wire is taped to a length of wood to form a potentiometer. The length between the contacts is 84 cm.

The potential gradient along this wire is 14.3 V m^{-1} .

A cell is connected in parallel with 65 cm of the resistance wire. The centre-zero galvanometer shows no deflection.



What is the electromotive force (e.m.f.) of the cell?

- A** 2.7 V **B** 9.3 V **C** 11 V **D** 12 V

- 23** Two long, straight, current-carrying wires, X and Y, are parallel. The current in wire X is 2 A and