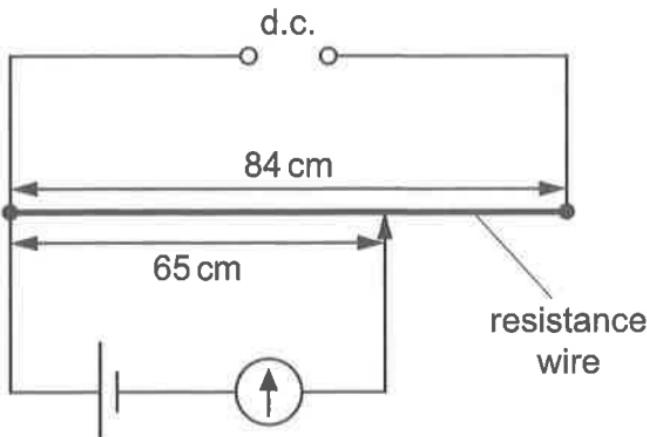


- 22 A resistance wire is taped to a length of wood to form a potentiometer. The length between the contacts is 84 cm.

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

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 2.7V      B 9.3V      C 11V      D 12V

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