

- 22** A cell of emf E and internal resistance r is connected to a variable resistor R as shown in Fig. 1. Fig. 2 shows the variation of the ammeter reading I with the voltmeter reading V as R is varied.

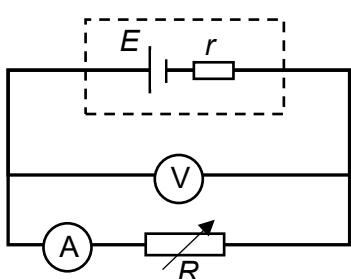


Fig. 1

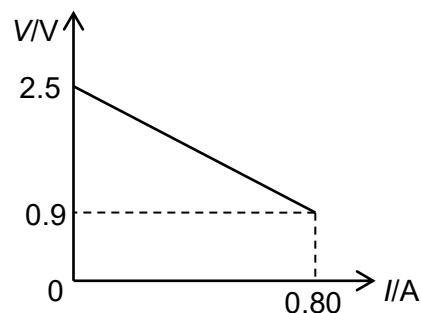


Fig. 2

Assuming that both the voltmeter and ammeter are ideal, what is the internal resistance r of the cell?

A 2.0Ω

B 1.7Ω

C 1.3Ω

D 1.1Ω

