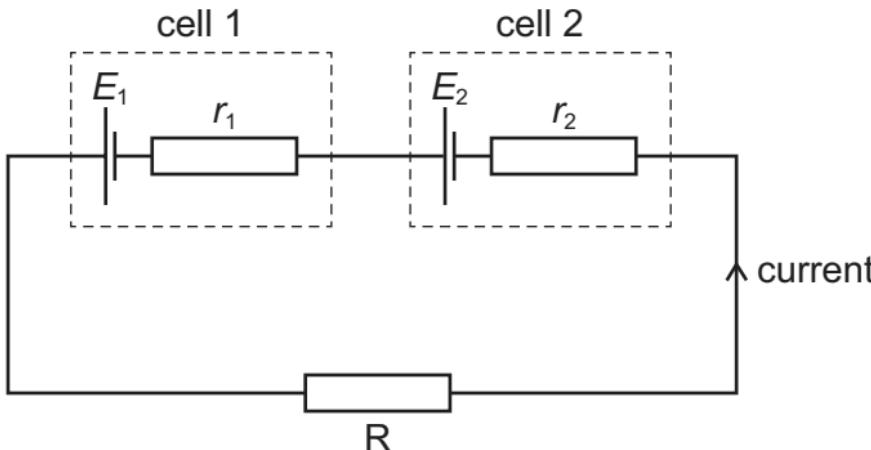


- 34 Two cells with electromotive forces E_1 and E_2 and internal resistances r_1 and r_2 are connected to a resistor R as shown.



The terminal potential difference across cell 1 is zero.

Which expression gives the resistance of resistor R?

A $\frac{E_2 r_1 - E_1 r_2}{E_1}$

B $\frac{E_2 r_1 - E_1 r_2}{E_2}$

C $\frac{E_1 r_2 - E_2 r_1}{E_1}$

D $\frac{E_1 r_2 - E_2 r_1}{E_2}$

- 35 A battery has an electromotive force (e.m.f.) E and internal resistance r . The battery delivers a