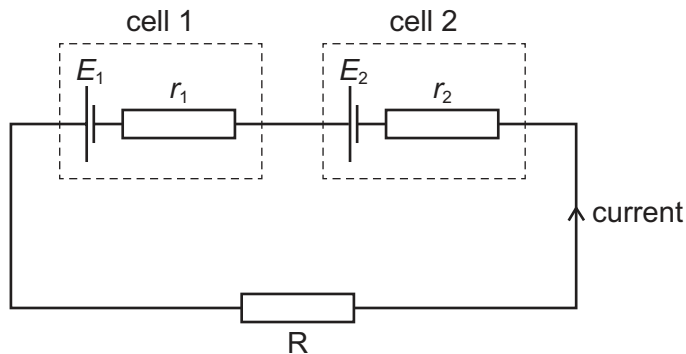


- 34** Two cells with electromotive forces E_1 and E_2 and internal resistances r_1 and r_2 are connected to a resistor R as shown.



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