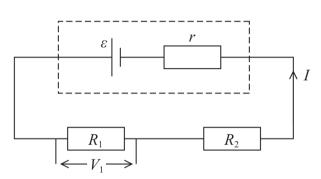
The diagram shows a cell of e.m.f.  $\varepsilon$  and internal resistance r. The cell is connected in series with two resistors of resistance  $R_1$  and  $R_2$ . The potential difference across  $R_1$  is  $V_1$ . The current in the circuit is I.



Which of the following expressions is correct?

$$\triangle$$
 **A**  $\varepsilon = V_1 + Ir$ 

$$\square$$
  $\mathbf{C}$   $\varepsilon = IR_2 + Ir$ 

$$\square \qquad \mathbf{D} \quad \varepsilon = V_1 + IR_2 + Ir$$