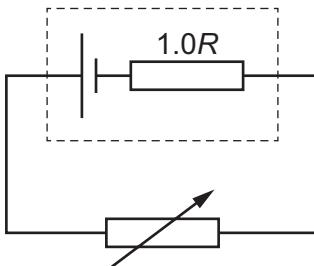


- 35 The diagram shows a cell of internal resistance $1.0R$ connected to a variable resistor.



When the variable resistor has an initial resistance of $2.0R$, the current in the cell is I_1 and the terminal potential difference (p.d.) across the cell is V_1 .

The variable resistor is now adjusted to a new resistance of $4.0R$.

What is the new current in the cell and the new terminal p.d. across the cell?

	current	terminal p.d.
A	$0.50I_1$	$1.0V_1$
B	$0.50I_1$	$1.2V_1$
C	$0.60I_1$	$1.0V_1$
D	$0.60I_1$	$1.2V_1$