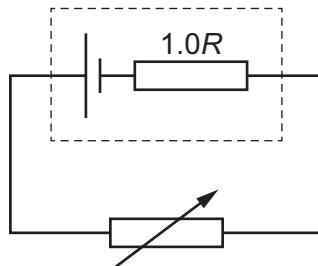


**35** The diagram shows a cell of internal resistance  $1.0R$  connected to a variable resistor.



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.
<b>A</b>	$0.50I_1$	$1.0V_1$
<b>B</b>	$0.50I_1$	$1.2V_1$
<b>C</b>	$0.60I_1$	$1.0V_1$
<b>D</b>	$0.60I_1$	$1.2V_1$