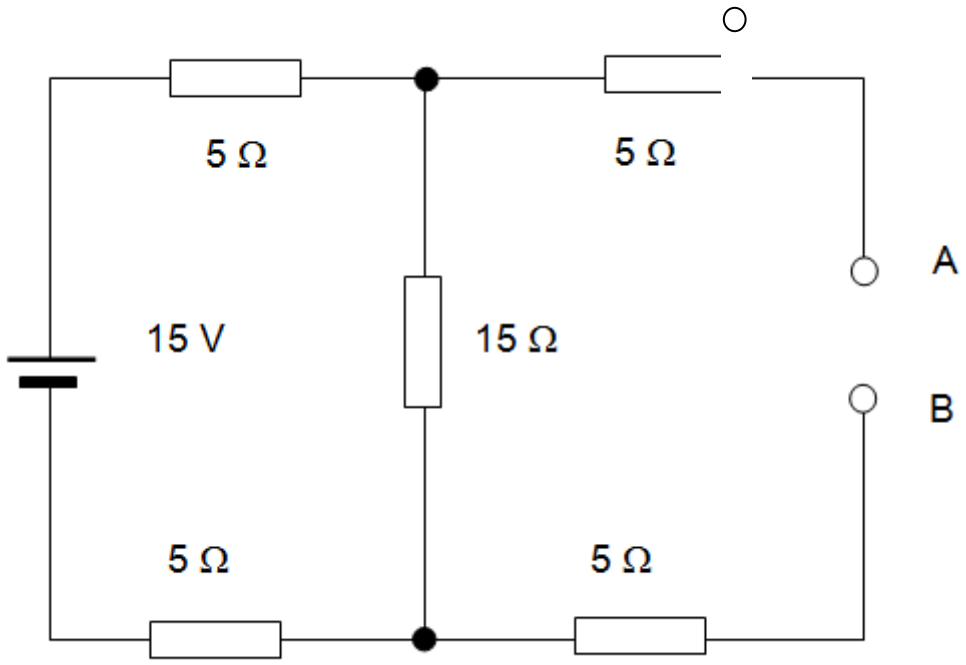
Self Test

1.	(a)	Leon Thévenin proposed a rule that enabled electrical engineers to simplify complex power supplies. In the space below, write down the rule and draw a circuit that shows the rule	**4.4**	*(3)*
	(b)	The circuit below is being used as a source of voltage. 	**4.4**	

	(i)	Show that the Thévenin voltage across AB is 9 V	**4.4**	*(2)*
	(ii)	Calculate the Thévenin resistance.	**4.4**	*(3)*
	(c)	A 10 ohm resistor is now placed across the gap AB.	**4.4**	
	(i)	Calculate the current across the 10 ohm resistor.		*(2)*
	(ii)	Calculate the voltage across the 10 ohm resistance.		*(2)*
	(d)	How is Norton's theorem used to model a complex source?		*(2)*