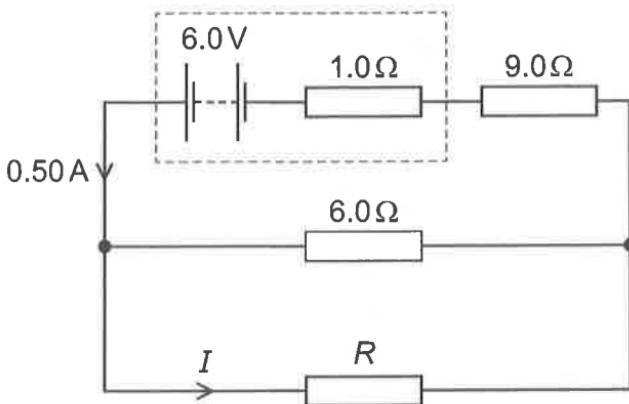


- 23 A battery of e.m.f. 6.0V and internal resistance 1.0Ω is connected in series to a 9.0Ω resistor and a parallel combination of resistors of resistance 6.0Ω and R . The battery delivers a current of 0.50A to the circuit.



What are the values of the unknown current I and the resistance R , as shown in the diagram?

	I/A	R/Ω
A	0.17	9.0
B	0.25	4.0
C	0.25	6.0
D	0.33	3.0

- 24 A solenoid coil of side 20 mm has 50 turns. It hangs vertically so that it can rotate freely about