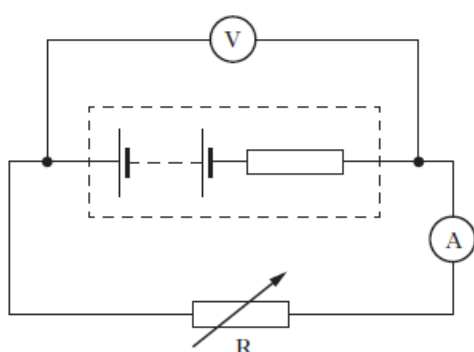


Unit 3 – Electricity

Section 3 - Electrical Sources & Internal Resistance

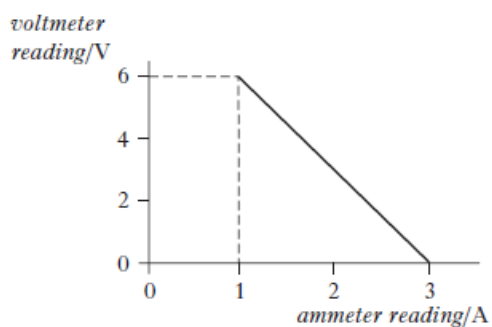
- 2008** 9. The e.m.f. of a battery is
- A the total energy supplied by the battery
 - B the voltage lost due to the internal resistance of the battery
 - C the total charge which passes through the battery
 - D the number of coulombs of charge passing through the battery per second
 - E the energy supplied to each coulomb of charge passing through the battery.

- 2012** 8. A circuit is set up as shown.



The variable resistor R is adjusted and a series of readings taken from the voltmeter and ammeter.

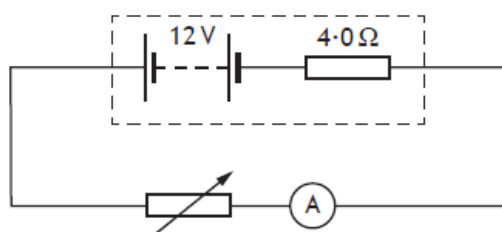
The graph shows how the voltmeter reading varies with the ammeter reading.



Which row in the table shows the values for the e.m.f. and internal resistance of the battery in the circuit?

	<i>e.m.f./V</i>	<i>internal resistance/Ω</i>
A	6	2
B	6	3
C	9	2
D	9	3
E	9	6

2016 19. A circuit is set up as shown.



The resistance of the variable resistor is increased and corresponding readings on the ammeter are recorded.

Resistance (Ω)	2.0	4.0	6.0	8.0
Current (A)	2.0	1.5	1.2	1.0

These results show that as the resistance of the variable resistor increases the power dissipated in the variable resistor

- A increases
- B decreases
- C remains constant
- D decreases and then increases
- E increases and then decreases.