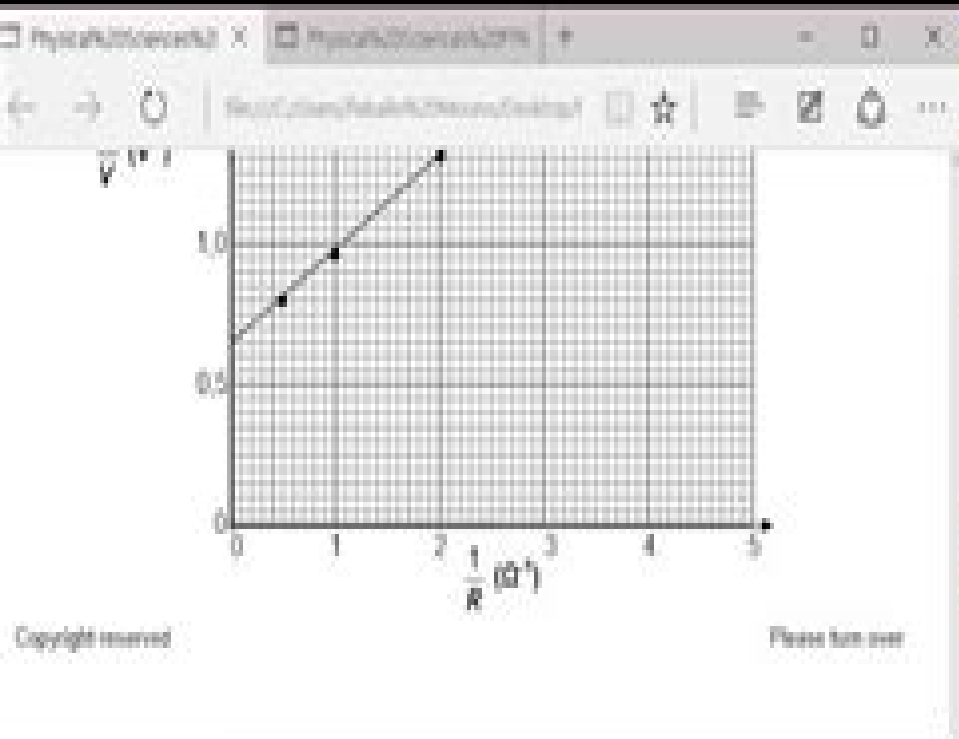




9.1.1 Write down a mathematical relationship for the slope of the graph. (1)

Use the information in the graph and calculate the:

9.1.2 End of the cell (2)

9.1.3 Internal resistance of the cell (3)

9.2 In the electrical circuit shown below, the battery has an emf of 6 V and an internal resistance of 1 Ω. The total external resistance of the circuit is 9 Ω.

VID 1 OF 10 : CEE11K117

1. $\frac{1}{R_2} = \frac{1}{R_1} + \frac{1}{R_3}$ 2. $E = I(R+r)$ 3. $V = IR$ 4. $\frac{1}{-} = \frac{1}{+} = \frac{1}{-}$ 5. $\frac{1}{-}$ 6. $\times$ 7. $P = I^2 R$

Question 9 (Physical Sciences - Physics (P1) - Exemplar 2014)

$\frac{1}{V} = \frac{1}{IR} + \frac{1}{E}$

$y = mx + C$

$y = 1/V$

$x = 1/R$

$m = r/E$ m is the slope/gradient of the graph

$C = 1/E$ - where the graph cut the y-axis

9.1.1. Slope = r/E

9.1.2. $1/E =$

9.1.3.

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