

## What equations do I need to know for the Edexcel IGCSE physics exam for the Magnetism and Electromagnetism topic?

In the list below the equations are grouped into the ones that need learning for IGCSE Edexcel double award (4SD0) and Physics only specification (8463). The bold type equations are Paper 2 only.

There are only equations in this topic that are paper 2 only so only physics only students of IGCSE Edexcel Physics need to memorize all the equations.

Equations to Learn	
input (primary)voltage output (secondary)voltageprimary turns secondary turns	$\frac{\mathbf{V}_{\mathbf{P}}}{\mathbf{V}_{\mathbf{S}}} = \frac{\mathbf{N}_{\mathbf{P}}}{\mathbf{N}_{\mathbf{S}}}$
input power = output power for 100% efficiency	$\mathbf{V}_{\mathbf{P}} \times \mathbf{I}_{\mathbf{P}} = \mathbf{V}_{\mathbf{S}} \times \mathbf{I}_{\mathbf{S}}$