

DIGITAL LOGIC CIRCUITS

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On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

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DIGITAL LOGIC TABLES AND GATES

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PLEASE NOTE:

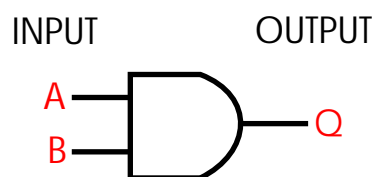
A '1' means that current is present. For instance, if current is present at an output of a gate then this is represented as a '1'. Instead of placing a '1' at the output other terms can be applied - **high**, **true**, **on** or **up** - all mean that current is present.

A '0' means that current is not present. For instance, if current is not present at an output of a gate then this is represented as a '0'. Instead of placing a '0' at the output other terms can be applied - **low**, **false**, **off** or **low** - all mean that current is not present.

Alternative ways of representing the **AND** gate are written below. Complete each of the truth tables.

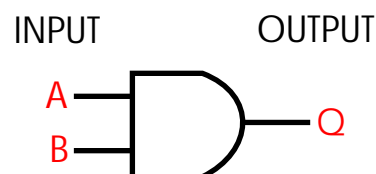
AND gate

A	B	Q
LOW		LOW
LOW	HIGH	LOW
HIGH	LOW	
	HIGH	HIGH



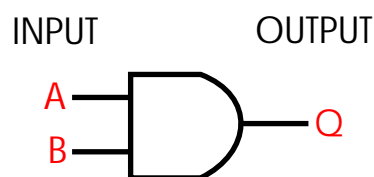
AND gate

A	B	Q
OFF		OFF
OFF	ON	OFF
ON	OFF	
	ON	ON



AND gate

A	B	Q
FALSE		FALSE
FALSE	TRUE	FALSE
TRUE	FALSE	
	TRUE	TRUE



QUESTION:

Complete the AND truth table below using 1s and 0s.

AND gate

A	B	Q

