

3.4 Computer systems

3.4.2 Boolean logic

Content	Additional information	Chk
Construct truth tables for the following logic gates: <ul style="list-style-type: none"> • NOT • AND • OR • XOR 	Students do not need to know about or use NAND and NOR logic gates.	
Construct truth tables for simple logic circuits . Interpret the results of simple truth tables.	Students should be able to construct truth tables which contain up to three inputs.	
Create, modify and interpret simple logic circuit diagrams .	Students should be able to construct simple logic circuit diagrams which contain up to three inputs. Students will only need to use AND, OR, NOT and XOR gates within logic circuits.	
Create and interpret simple Boolean expressions made up of NOT, AND, OR and XOR operations.	Students will be expected to understand and use the expressions: <ul style="list-style-type: none"> . to represent the AND gate + to represent the OR gate ⊕ to represent the XOR gate Overbar to represent the NOT gate For example the expression (A AND B) OR (NOT C) would be represented as: $(A.B) + \bar{C}$	
Create the Boolean expression for a simple logic circuit. Create a logic circuit from a simple Boolean expression.		