

# Truth tables

## Worksheet 1

1 Complete the following sentence:

Logic gates are switches which perform a logical function on one or more logical \_\_\_\_\_ and produce a single logical \_\_\_\_\_.

2 In the spaces below draw the symbols used to represent the following logic gates.

AND

OR

NOT

3 Complete the following sentence:

A truth table is a breakdown of a logic function by listing all possible \_\_\_\_\_ the function can attain.


4 Complete the truth tables for the following gates.

(a)


Symbol	Truth table		
	A	B	Q



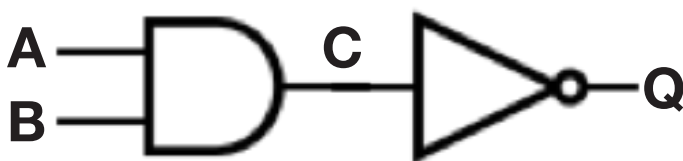
- 4 Complete the truth tables for the following gates.  
(b)

Symbol	Truth table		
	A	B	Q

(c)

Symbol	Truth table	
	A	B

- 5 (a) Complete the truth table for the following combination.



A	B	C	D

- (a) Give the logic statement for this combination.



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Give the logic gate drawing and the truth table for the following logic statement.

**$Q = \text{NOT} (A \text{ OR } B)$**

A	B	C	D