

# 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



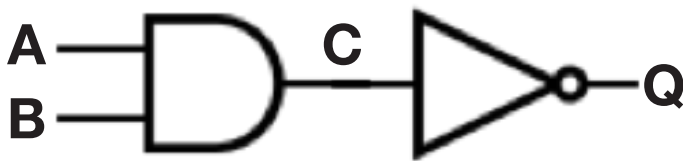
**4** Complete the truth tables for the following gates.  
(b)

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	Q

(a) Give the logic statement for this combination.



6

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