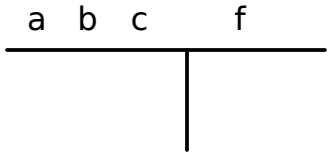
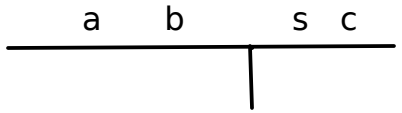
```
Espresso Handout

For each example, the input file and output are separated
by a line of '='

======================EXAMPLE 1==================================

# Espresso Input File
# P.Walsh Oct 2002

# .i specifies the number of inputs
# .o specifies the number of outputs
# note, place .end at the end of the file

# Example: Majority Function
# Input File Name: maj_esp.in
# Output: stdout (redirect to file if required)
# Usage: espresso < maj_esp.in

.i 3
.o 1
```




```
000 0
001 0
010 0
011 1
100 0
101 1
110 1
111 1

.end

======================OUTPUT====================================

# Espresso Input File
# P.Walsh Oct 2002
# .i specifies the number of inputs
# .o specifies the number of outputs
# note, place .end at the end of the file
# Example: Majority Function
# Input File Name: maj_esp.in
# Output: stdout (redirect to file if required)
# Usage: espresso < maj_esp.in
.i 3
.o 1
.p 3
11- 1
1-1 1
-11 1
.e

======================EXAMPLE 2==================================

# Espresso Input File
# P.Walsh Oct 2002

# .i specifies the number of inputs
# .o specifies the number of outputs
# note, place .end at the end of the file

# Example: Half Adder
# Input File Name: ha_esp.in
# Output: stdout (redirect to file if required)
# Usage: espresso < ha_esp.in

.i 2
.o 2
```

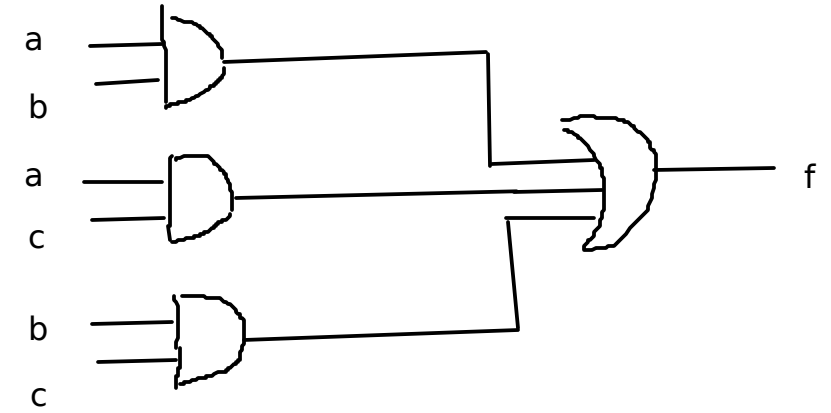


```
00 00
01 10
10 10
11 01

.end
```




```
======================OUTPUT====================================

# Espresso Input File
# P.Walsh Oct 2002
# .i specifies the number of inputs
# .o specifies the number of outputs
# note, place .end at the end of the file
# Example: Half Adder
# Input File Name: ha_esp.in
# Output: stdout (redirect to file if required)
# Usage: espresso < ha_esp.in
.i 2
.o 2
.p 3
10 10
01 10
11 01
.e
```

Example 1



Example 2