Truth Tables

Simple **Truth tables** are fairly straightforward. The problems come when more complex logic statements are used. Especially when they have three inputs...

A	B	A AND B

A	B	A OR B

Truth Tables

1 = True
0 = False

NOT(A AND B)

A	B	A AND B	NOT(A AND B)
1	1		
1	0		
0	1		
0	0		

Can you also:

- write the notation form for the logic statement?
- draw the circuit diagram?

Truth Tables

1 = True
0 = False

(NOT A) OR B

A	B	NOT A	(NOT A) OR B
1	1		
1	0		
0	1		
0	0		

Can you also:

- write the notation form for the logic statement?
- draw the circuit diagram?

Truth Tables

1 = True
0 = False

(A OR B) AND NOT(A AND B)

A	B	R = A OR B	S = NOT(A AND B)	R AND S
1	1			
1	0			
0	1			
0	0			

Can you also:

- write the notation form for the logic statement?
- draw the circuit diagram?

Truth Tables

1 = True
0 = False

A XOR B

A	B	A XOR B
1	1	
1	0	
0	1	
0	0	

Can you also:

- write the notation form for the logic statement?
- draw the circuit diagram?

Truth Tables

1 = True
0 = False

(A OR B) AND C

A	B	C	A OR B	(A OR B) AND C
1	1	1		
1	1	0		
1	0	1		
1	0	0		
0	1	1		
0	1	0		
0	0	1		
0	0	0		

Truth Tables

1 = True
0 = False

(A AND B) OR NOT C

A	B	C	R = A AND B	S = NOT C	R OR S
1	1	1			
1	1	0			
1	0	1			
1	0	0			
0	1	1			
0	1	0			
0	0	1			
0	0	0			

Truth Tables

1 = True
0 = False

A AND (B OR NOT C)

A	B	C	NOT C	R = B OR NOT C	A AND R
1	1	1			
1	1	0			
1	0	1			
1	0	0			
0	1	1			
0	1	0			
0	0	1			
0	0	0			