**Boolean Algebra**

1. Evaluate the following Boolean expressions with *x = y = 1* and *w = z = 0*.
2. 
3. 
4. 
5. Indicate whether the following Boolean expressions are in conjunctive normal form or disjunctive normal form, or both, or neither.
6. 
7. 
8. 
9. 
10. Give a Boolean expression for each of the functions below specified by the input/output table. Use the sum of minterm expression described in the text.
(For part a, the function should be f(x, y), not f(x, y, z).)

a.



b.



1. Draw circuits that compute the following Boolean expressions:
2. 
3. 
4. Draw a circuit that computes the function -- f(x,y), not f(x,y,z) -- described in the input/output table:



1. Give an equivalent Boolean expression for the following circuit:

