Name _____ Date _____

## Disjunctions [asks for Logic Table] - Step-by-Step Lesson

a. Make a truth table for the statement:

~M **V** N

**Explanation:**

If the original is true, the ~ statement is false, and if the original is false, the ~ statement is true. In truth table original of ~M is true, than ~M is false.

The symbol " **V** " signifies inclusive disjunction a **V** statement is true whenever either (or both) of its component statements is true; it is false only when both of them are false.

We are working with disjunction statements. Disjunctions are true when just one of the other statements are true. Disjunctions are only false when both statements are false.

Let take that to our truth table and we should get:

| M | N | ~M | ~M **V** N |
|---|---|---|---|
| T | T | F | T |
| F | F | T | T |