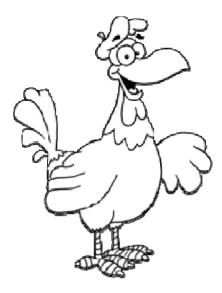
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Conditionals [asks for Logic Table] - Step-by-Step Lesson

Make a truth table for the statements:

 $\sim A \rightarrow B$ 



## **Explanation**:

Conditionals are usually shaped in the sentence form of if-then. They are false only when the "if; statement is true and the "then" statement is false.

If the original is true, the  $\sim$  statement is false, and if the original is false, the  $\sim$  statement is true. In a truth table the original statement of  $\sim A$  is true, then  $\sim A$  is false.

The  $\rightarrow$  symbol is used to symbolize a relationship called material implication; a compound statement formed with this connective is true unless the component on the left (the antecedent) is true and the component on the right (the consequent) is false.

| A | В | ~A | ~A → B |
|---|---|----|--------|
| Т | Т | F  | Т      |
| F | F | Т  | F      |

