

TRANSLATE the ARGUMENT INTO symbolic FORM. Then determine whether the ARGUMENT is valid or invalid.

" IF the school cuts it's art program, some parents will NOT riot

" IF some Parents riot, they will NOT have clear CRIMINAL RECORDS.

They have clear criminal Records

The school did not cut it's program

USE a truth table to determine whether the
two statements ARE equivalent

$$\neg p \rightarrow q \wedge \neg q \rightarrow \neg p \text{ and } \neg q \leftrightarrow \neg p$$

1) Construct a truth table for the given statement

$$\neg q \leftrightarrow p$$

2.) Write the statement below in symbolic form and construct a truth table. Then indicate under what condition, if any, the compound statement is TRUE. Let p represent the statement $x \leq 2$ and let q represent the statement ~~$x \geq 9$~~ $x < 9$

It is not true that $x \leq 2$ and $x \geq 9$, but $x > 2$ and $x < 9$

What is the compound statement in symbolic form.