| Worksheet Exercise 2.5.C. | Name $\quad$ Class $\quad$ Date |
| :--- | :--- | :--- |
| Truth-tables for Validity |  |

Part C. Give complete truth-tables for the following arguments to determine whether they are valid. Label the columns as "aux," "prem," or "concl."
1.
$A \supset(B \& C)$
$\sim C \supset \sim B$
$\sim$ A
$\therefore \sim B$
arg is $\qquad$

2.

E V ~P
U V ~E
$\sim U V \sim E$
$\therefore \sim(\mathrm{P} \& \mathrm{E})$
arg is $\qquad$

3.
$\sim(A \equiv B)$
$B \equiv \sim C$
$\therefore \sim(\mathrm{A} \equiv \mathrm{C})$
arg is $\qquad$

4.

| A B C |  |
| :--- | :--- |
|  |  |
|  |  |

arg is $\qquad$
$\qquad$
5.

P $\supset T$
$\sim T \supset \sim Q$
$\sim(\sim P \& \sim Q)$
$\therefore \mathrm{T}$
arg is $\qquad$

6.
$(A \vee \sim B) \equiv(C \& B)$
$\mathrm{C} \supset \sim \mathrm{A}$
$\therefore \sim A \& B$
arg is $\qquad$

7.
$F \supset(G \& A)$
~G V M
$\therefore \mathrm{MV} \sim \mathrm{F}$
arg is $\qquad$


For problem \#8, write one row of the table in which all the premisses are $T$ and in which the conclusion is $F$.
8. $(\mathrm{M} \supset \mathrm{S}) \supset(\mathrm{N} \& \mathrm{O}), \sim \mathrm{S}, \mathrm{O} \supset \mathrm{S} \quad \therefore \sim \mathrm{M}$


The argument is $\qquad$ .

