

Worksheet Exercise 2.5.A.

Name _____

Truth-tables for Validity

Class _____ Date _____

Part A. Give complete truth-tables for these arguments to determine whether they are valid. Label the columns as "aux," "prem," or "concl."

1. A B | _____

$\sim(A \& B)$		
$\sim A$		
<hr style="border: 0.5px solid black;"/>		
$\therefore B$		

argument is: _____

2. K M | _____

$K \vee M$		
$\sim M$		
<hr style="border: 0.5px solid black;"/>		
$\therefore \sim M$		

argument is: _____

3. R S | _____

$\sim R \vee \sim S$		
$\sim R \vee S$		
<hr style="border: 0.5px solid black;"/>		
$\therefore \sim R$		

argument is: _____

4. G H | _____

$G \supset (G \& H)$		
$\sim G$		
<hr style="border: 0.5px solid black;"/>		
$\therefore \sim H$		

argument is: _____

5. A W | _____

$A \vee W$		
$\sim A \vee \sim W$		
<hr style="border: 0.5px solid black;"/>		
$\therefore \sim W \equiv A$		

argument is: _____

>> continued on back side >>

6.	Q P		argument is: _____

$\sim(Q \& \sim P)$
 $\frac{Q}{\therefore Q \& P}$

7.	D T		argument is: _____

$\sim D \supset \sim T$
 $\frac{D \supset T}{\therefore T \vee D}$

8.	F G A		argument is: _____

$F \supset (G \& A)$
 $\frac{\sim G}{\therefore \sim F}$

9.	F G A		argument is: _____

$F \supset (G \vee A)$
 $\frac{\sim G}{\therefore \sim F}$

10.	S K B		argument is: _____

$S \equiv \sim K$
 K
 $\frac{\sim B \supset S}{\therefore \sim B \vee S}$