#10

$f_2 + f_4$

$=$

F T F T $= f_5(A,B)$

TT	TF	FT	FF	
T	F	T	T	$A \Rightarrow B$

$f_6(A,B)$

TFTT

$\bar{A} = A \uparrow A$

$AB = (A \uparrow B) \uparrow (A \uparrow B)$

$A+B = (A \uparrow A) \uparrow (B \uparrow B)$

$AB = (\overline{AB}) \uparrow (\overline{AB})$

$AB = (AB) + AB$

$AB = AB$

$A \uparrow B = \overline{AB} = \bar{A} + \bar{B}$ #11

$A \downarrow B = \overline{A+B} = \bar{A} \cdot \bar{B}$

$A+B = (\overline{AA}) \uparrow (\overline{BB})$ ★ Substitution

$A+B = (AA) + (BB)$

$A+B = A+B$

$\bar{A} = A \uparrow A$

$\bar{A} = (\bar{A}) + (\bar{A})$

$\bar{A} = \bar{A}$