

$\forall \rightarrow \forall \cdot p \rightarrow q$
 TT T
 FF T
 FT T
 TF F

Assignment 6

1. Complete the truth tables shown below.

a)

p	q	$p \leftrightarrow q$
True	True	T
True	False	F
False	True	F
False	False	T

b)

p	q	$p \wedge q$
True	True	T
True	False	F
False	True	F
False	False	F

Both p and q are T

c)

p	q	$\neg p$	$\neg q$	$\neg p \vee \neg q$
T	T	F	F	F
T	F	F	T	T
F	T	T	F	T
F	F	T	T	T

OR OR OR

d)

a	b	$\sim a$	$\sim a \Rightarrow b$
T	T	F	T
T	F	F	T
F	T	T	T
F	F	T	F

FT \rightarrow T
 FF \rightarrow T
 TT \rightarrow T
 TF \rightarrow F

e)

P	Q	P'	$Q \Rightarrow P'$
T	T	F	F
T	F	F	T
F	T	T	T
F	F	T	T

TF \rightarrow F
 PF \rightarrow T
 TT T
 FT T