

2.3

8)

P
T
T
T
F
F

Q
T
F
F
T
F

\neg
T
T
T
F
T
T

$P \vee Q$
T
T
T
T
T
F

$P \rightarrow \neg Q$
T
F
T
T
T
T

$P \rightarrow R$
T
F
T
T
T
T

R
T
F
F
T
F

$\neg R$
F
T
T
F
F
T

Invalid

24) If Jules solved correctly, Jules obtained Answer 2.
P \rightarrow Q

Jules obtained the answer 2

Jules solved the problem correctly
P converse error

43) a) $\neg P \vee Q \rightarrow R = \neg P \rightarrow R \wedge \neg S$

b) $S \vee \neg Q = t \rightarrow S$

c) $u \rightarrow \neg p = t$

d) $p \rightarrow t = \neg w$

e) $\neg p \wedge R \rightarrow \neg S = u \vee w$

f) $\therefore \neg T = \therefore \neg T$