

- 1. True
- 2. True
- 3. True
- 4. False
- 5. False
- 6. False
- 7. True
- 8. True
- 9. True
- 10. True
- 11. False
- 12. True
- 13. True
- 14. True
- 15. True
- 16. True
- 17. False
- 18. False

S	t	$\sim S$	$\sim S \vee t$
T	T	F	T
T	F	F	F
F	T	T	T
F	F	T	T

S	t	$\sim S$	$\sim t$	$\sim S \vee \sim t$
T	T	F	F	F
T	F	F	T	T
F	T	T	F	T
F	F	T	T	T

$$\sim r \wedge \sim (q \vee p)$$

$$\sim F \wedge \sim (T \vee T)$$

$$T \wedge \sim (T)$$

$$T \wedge F = \boxed{F}$$

$$p \rightarrow T, q \rightarrow T, r \rightarrow F$$

1.4 cont

Sept. 26, 2006

Construct a TruthTable for
 $P \vee (\sim q \wedge P)$

Reference Table # 4

P	q	$\sim q$	$(\sim q \wedge P)$	$P \vee (\sim q \wedge P)$
T	T	F	F	T
T	F	T	T	T
F	T	F	F	F
F	F	T	F	F

Construct a TruthTable for
 $P \wedge (\sim q \vee P)$

Reference Table #5

P	q	$\sim q$	$(\sim q \vee P)$	$P \wedge (\sim q \vee P)$
T	T	F	T	T
T	F	T	T	T
F	T	F	F	F
F	F	T	T	F

Back to Reg. Paper.

\sim means Not + goes to

Conjunction: Negations

It is True if both are True

The symbol is \wedge
What word does it mean "and"

Disjunction:

It is False if both are False

The symbol is \vee
What word does it mean "or"

$\mathbb{N} \rightarrow$ Natural #'s $\{1, 2, 3, 4, \dots\}$

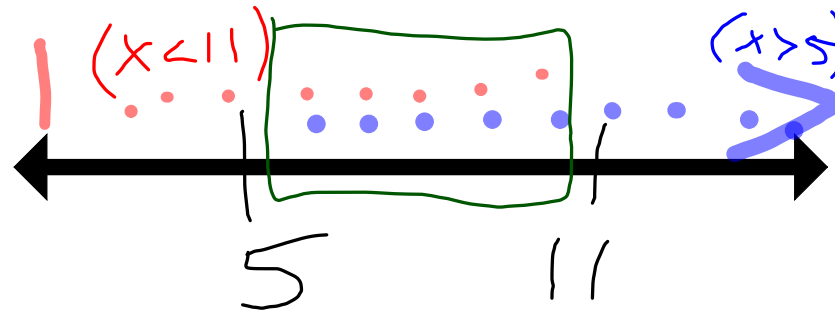
$\mathbb{W} \rightarrow$ Whole #'s $\{0, 1, 2, 3, \dots\}$

$\mathbb{Z} \rightarrow$ Integers $\{\dots, -2, -1, 0, 1, 2, \dots\}$

$\mathbb{Q} \rightarrow$ Rational $\frac{\mathbb{Z}}{\mathbb{Z}} \left\{ \frac{\dots -2, -1, 0, 1, 2, \dots}{\dots -2, -1, 0, 1, 2, \dots} \right\}$

$\mathbb{R} \rightarrow$ Real $\{\dots -1 \dots 0 \dots 1 \dots 2 \dots\}$

Domain \mathbb{N}
 $(x > 5) \wedge (x < 11)$



$\{6, 7, 8, 9, 10\}$

$\wedge \leftrightarrow$ and \leftrightarrow conjunction \leftrightarrow Intersection

Bert, Bart, Judi, Julie, Ann
Write the S.S. for.

Starts with 'B' → {Bert, Bart}

Starts with 'A' → {Ann}

Has 2 or More vowels → {Judi, Julie}



O.T.L.

Finish yesterday's O.T.L.

① Study for Quest
which will be
Thursday ☺

② Do wk. st. 1.4 on
"Disjunction"
except #8 & #9