

①

2.1 1, 3, 7, 8, 9, 10, 11, 12, 13, 27, 28, 30, 37, 38, 39

And  
 $\wedge$ 

1. a) False

b) true

c) False

d) true

OR

e) true

✓

3. a) I Won't rain or snow tomorrow.

b) If you won't drive, I won't walk

7. a) True, true, true, False

8. a)  $\otimes$  b)  $\perp$  c)  $\emptyset$ 9. a)  $0 \wedge (0 \vee 1) \quad 0 \wedge 1 = \text{False} / 0$ b)  $1 \wedge (\sim(0 \vee 0)) = 1 \wedge 1 = 1 / \text{True}$ c)  $(1 \wedge 1) \vee (1 \vee 1) \quad 1 \vee 1 = \text{True} / 1$ d)  $(0 \wedge 1) \wedge (1 \vee 0) = 0 \wedge 1 = \text{False} / 0$ 10. ~~BD~~

11. D

12. a)  $p \wedge \sim r$ b)  $q \vee p$ c)  $\sim p \wedge \sim q$ d)  $r \wedge q$ 

13. The dish did not run away and the grass is wet

The grass is not wet or the dish ran away

Today isn't Monday &amp; the grass isn't wet

Today is Monday or the dish didn't run away

27.	P	q	$(\sim p \wedge q)$	$\vee$	P
	0	0	F0	F	0
	0	1	T1	T	0
	1	0	T1	T	1
	1	1	F0	T	1