3.3

P34

5:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| p | q | r | q∨r | p∧(q∨r) | p∧q | p∧r | (p∧q)∨(p∧r) |
| T | T | T | T | T | T | T | T |
| T | T | F | T | T | T | F | T |
| T | F | T | T | T | F | T | T |
| T | F | F | F | F | F | F | F |
| F | T | T | T | F | F | F | F |
| F | T | F | T | F | F | F | F |
| F | F | T | T | F | F | F | F |
| F | F | F | F | F | F | F | F |

P35：

15：No.

P36:

53:

先考虑：p | q

|  |  |  |  |
| --- | --- | --- | --- |
| p | q | p ∧ q | p | q |
| T | T | T | F |
| T | F | F | T |
| F | T | F | T |
| F | F | F | T |

再考虑：q | p

|  |  |  |  |
| --- | --- | --- | --- |
| q | p | q ∧ p | q | p |
| T | T | T | F |
| T | F | F | T |
| F | T | F | T |
| F | F | F | T |

所以：（p | q）and（q | p）is equivalent.

57：

p: The directory database is opened.

q: The system is in its initial state.

r: The monitor is put in a closed state.

(p ∧ ¬q) → r