

$$V_{1,1} = \bigwedge_{i=1}^3 V_{1i,1}$$

$$V_{1,2} = \bigwedge_{i=1}^3 (V_{1i,2} \vee (V_{1i,1} \oplus V_{1,1}))$$

$$V_{1,3} = \bigwedge_{i=1}^3 (V_{1i,3} \vee (V_{1i,2} \oplus V_{1,2}) \vee (V_{1i,1} \oplus V_{1,1}))$$

$$V_{1i,1} = \bigvee_{j=1}^3 V_{1ij,1}$$

$$V_{1i,2} = \bigvee_{j=1}^3 (V_{1ij,2} \wedge \neg (V_{1ij,1} \oplus V_{1i,1}))$$

$$V_{1i,3} = \bigvee_{j=1}^3 (V_{1ij,3} \wedge \neg (V_{1ij,2} \oplus V_{1i,2}) \wedge \neg (V_{1ij,1} \oplus V_{1i,1}))$$

$$V_{1ij,1} = \bigwedge_{k=1}^3 V_{1ijk,1}$$

$$V_{1ij,2} = \bigwedge_{k=1}^3 (V_{1ijk,2} \vee (V_{1ijk,1} \oplus V_{1ij,1}))$$

$$V_{1ij,3} = \bigwedge_{k=1}^3 (V_{1ijk,3} \vee (V_{1ijk,2} \oplus V_{1ij,2}) \vee (V_{1ijk,1} \oplus V_{1ij,1}))$$