

$$n=2$$

$$[n] = [2] = \{1, 2\}$$

$$S \subset \{1, 2\} \Rightarrow S = \emptyset, \\ S = \{1\}, \\ S = \{2\} \text{ or} \\ S = \{1, 2\}$$

$$S = \emptyset \quad \varphi_{\emptyset} = ''$$

$$\psi_{\emptyset} = \bigvee_{i \in [2]} \neg x_i = (\neg x_1) \vee (\neg x_2)$$

$$\gamma_{\emptyset} = \varphi_{\emptyset} \vee \psi_{\emptyset} = (\neg x_1) \vee (\neg x_2)$$

$$S = \{1\} \quad \varphi = x_1 \quad \psi = \bigvee_{i \in [2] \setminus \{1\}} (\neg x_i) = (\neg x_2)$$

$$[2] \setminus \{1\} = \{1, 2\} \setminus \{1\} = \{2\}$$

$$\gamma_S = x_1 \vee (\neg x_2)$$

$$S = \{2\} \quad \varphi = x_2 \quad \psi = (\neg x_1)$$

$$\gamma_S = (x_2) \vee (\neg x_1)$$

$$S = \{1, 2\} \quad \varphi = x_1 \vee x_2 \quad \psi = ''$$

$$\gamma_S = x_1 \vee x_2$$

$$\phi = \bigwedge_{S \subset [2]} \gamma_S = ((\neg x_1) \vee (\neg x_2)) \wedge (x_1 \vee (\neg x_2)) \wedge ((x_2) \vee (\neg x_1)) \wedge (x_1 \vee x_2)$$