$$\begin{array}{c} \text{S} & \overset{2}{\longrightarrow} & \text{P} \\ & & \text{OR} \quad v = 1 - \max \Big\{ f_1 \left(\mathbf{x}, \mathbf{k} \right), f_2 \left(\mathbf{x}, \mathbf{k} \right), \dots, f_N \left(\mathbf{x}, \mathbf{k} \right) \Big\} \\ & \overset{2}{\longrightarrow} & \text{P} \\ & & \text{OR} \quad v = \max \Big\{ f_1 \left(\mathbf{x}, \mathbf{k} \right), f_2 \left(\mathbf{x}, \mathbf{k} \right), \dots, f_N \left(\mathbf{x}, \mathbf{k} \right) \Big\} \\ & \overset{2}{\longrightarrow} & \text{P} \\ & \text{P} \\ & \overset{2}{\longrightarrow} & \text{AND} \quad v = \min \Big\{ u, d \Big\} \\ & u = \max_{f^+} \Big\{ f_1 \left(\mathbf{x}, \mathbf{k} \right), f_2 \left(\mathbf{x}, \mathbf{k} \right), \dots, f_U \left(\mathbf{x}, \mathbf{k} \right) \Big\} \\ & d = 1 - \max_{f^+} \Big\{ f_1 \left(\mathbf{x}, \mathbf{k} \right), f_2 \left(\mathbf{x}, \mathbf{k} \right), \dots, f_D \left(\mathbf{x}, \mathbf{k} \right) \Big\} \\ & d = 1 - \max_{f^+} \Big\{ f_1 \left(\mathbf{x}, \mathbf{k} \right), f_2 \left(\mathbf{x}, \mathbf{k} \right), \dots, f_D \left(\mathbf{x}, \mathbf{k} \right) \Big\} \\ \end{array}$$