

$$4) \quad v_1 = 2$$

$$\begin{array}{ll} v_1 + v_2 = 3 & \Rightarrow 1. \quad 2 + v_2 = 3 \Rightarrow v_2 = 1 \\ v_2 + v_3 \leq 3 & 3. \quad 1 + v_3 \leq 3 \quad \{1-2\} \\ v_1 \leq v_3 & \Rightarrow 2. \quad 2 \leq v_3 \quad \{2-5\} \\ v_3 \neq v_4 & 5. \quad 2 \neq v_4 \quad \{0, 1, 3-5\} \end{array} \quad \begin{array}{l} 4. \\ \{2\} \end{array}$$

$$\begin{array}{ll} v_1 = & \{0-5\} \\ v_2 = & \{0-5\} \\ v_2 = & \{0-5\} \\ v_4 = & \{0-5\} \end{array} \quad \begin{array}{l} \{2\} \\ \{1\} \\ \{2\} \\ \{0, 1, 3-5\} \end{array}$$

$$\begin{array}{ll} \text{forward} & v_1 = 2 \\ (1): (v_1, v_2) = & 2 + v_2 = 3 \Rightarrow 1 \Rightarrow v_2 \\ (3): (v_1, v_3) = & 2 \leq v_3 \quad \{2-5\} \end{array}$$

$$\begin{array}{ll} v_1 = & \{2\} \\ v_2 = & \{1\} \\ v_3 = & \{2-5\} \\ v_4 = & \{0-5\} \end{array}$$