

$$\binom{1}{\emptyset} = 1 \quad \square$$

$$\binom{2}{\emptyset} = 1 \quad \square \square$$

$$\binom{3}{\emptyset} = 3 \quad \square \square \square$$

$$\binom{3}{1} = 3$$

$$\binom{2}{1} = 2 \quad \begin{array}{cc} \blacksquare & \square \\ \square & \blacksquare \end{array}$$

$$\binom{3}{1} = 3 \quad \begin{array}{ccc} \blacksquare & \square & \square \\ \square & \blacksquare & \square \\ \square & \square & \blacksquare \end{array}$$

$$\binom{3}{2} = 3$$

$$\binom{3}{2} = 3 \quad \begin{array}{ccc} \blacksquare & \blacksquare & \square \\ \blacksquare & \square & \blacksquare \\ \square & \blacksquare & \blacksquare \end{array}$$

$$\binom{1}{1} = 1 \quad \blacksquare$$

$$\binom{2}{2} = 1 \quad \blacksquare \blacksquare$$

$$\binom{3}{3} = 1 \quad \blacksquare \blacksquare \blacksquare$$