

$$p_{k_2}^G = \{p_1, p_2, p_3\}$$

$$p_{k_1}^G = \{p_1, p_2\}$$

$$p_{k_3}^G = \{p_1, p_4\}$$

$$p_{k_5}^G = \{p_1, p_7, p_8\}$$

$$p_{k_{41}}^G = \{p_2, p_5, p_6\}$$

$$p_{k_{42}}^G = \{p_2, p_5, p_6\}$$

