

$$P_1 := \{\{1\}, \{2,3,4,5,6\}\}$$

1	2	3
4	5	6

$$P_2 := \{\{1,2,3\}, \{4,5,6\}\}$$

1	2	3
4	5	6

$$P_3 := \{\{1,2\}, \{3,4\}, \{5,6\}\}$$

1	3	5
2	4	6