

Number of vertices  $n = 5$ .

Number of singular graphs 17.

- Singular graph with  $|Aut(CUTP(G))| = 384$  and  $|ARes(G)| = 32$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 5
  3. vertex 3 adjacent to 5
  4. vertex 4 adjacent to 1
  5. vertex 5 adjacent to 1 2 3
- Singular graph with  $|Aut(CUTP(G))| = 192$  and  $|ARes(G)| = 64$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 5
  3. vertex 3 adjacent to 5
  4. vertex 4 adjacent to 1 5
  5. vertex 5 adjacent to 1 2 3 4
- Singular graph with  $|Aut(CUTP(G))| = 768$  and  $|ARes(G)| = 32$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 4 5
  3. vertex 3 adjacent to 5
  4. vertex 4 adjacent to 1 2
  5. vertex 5 adjacent to 1 2 3
- Singular graph with  $|Aut(CUTP(G))| = 192$  and  $|ARes(G)| = 32$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 4
  3. vertex 3 adjacent to 5
  4. vertex 4 adjacent to 1 2 5
  5. vertex 5 adjacent to 1 3 4

- Singular graph with  $|Aut(CUTP(G))| = 256$  and  $|ARes(G)| = 32$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 4 5
  3. vertex 3 adjacent to 5
  4. vertex 4 adjacent to 1 2 5
  5. vertex 5 adjacent to 1 2 3 4
- Singular graph with  $|Aut(CUTP(G))| = 4608$  and  $|ARes(G)| = 192$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 4 5
  3. vertex 3 adjacent to 4 5
  4. vertex 4 adjacent to 1 2 3
  5. vertex 5 adjacent to 1 2 3
- Singular graph with  $|Aut(CUTP(G))| = 4608$  and  $|ARes(G)| = 192$ :
  1. vertex 1 adjacent to 4 5
  2. vertex 2 adjacent to 4 5
  3. vertex 3 adjacent to 4 5
  4. vertex 4 adjacent to 1 2 3 5
  5. vertex 5 adjacent to 1 2 3 4
- Singular graph with  $|Aut(CUTP(G))| = 384$  and  $|ARes(G)| = 32$ :
  1. vertex 1 adjacent to 3 5
  2. vertex 2 adjacent to 4 5
  3. vertex 3 adjacent to 1
  4. vertex 4 adjacent to 2
  5. vertex 5 adjacent to 1 2
- Singular graph with  $|Aut(CUTP(G))| = 192$  and  $|ARes(G)| = 32$ :
  1. vertex 1 adjacent to 3 5

2. vertex 2 adjacent to 4 5
  3. vertex 3 adjacent to 1 5
  4. vertex 4 adjacent to 2
  5. vertex 5 adjacent to 1 2 3
- Singular graph with  $|Aut(CUTP(G))| = 1152$  and  $|ARes(G)| = 128$ :
    1. vertex 1 adjacent to 3 5
    2. vertex 2 adjacent to 4 5
    3. vertex 3 adjacent to 1 5
    4. vertex 4 adjacent to 2 5
    5. vertex 5 adjacent to 1 2 3 4
  - Singular graph with  $|Aut(CUTP(G))| = 1920$  and  $|ARes(G)| = 160$ :
    1. vertex 1 adjacent to 3 4
    2. vertex 2 adjacent to 4 5
    3. vertex 3 adjacent to 1 5
    4. vertex 4 adjacent to 1 2
    5. vertex 5 adjacent to 2 3
  - Singular graph with  $|Aut(CUTP(G))| = 192$  and  $|ARes(G)| = 32$ :
    1. vertex 1 adjacent to 3 4 5
    2. vertex 2 adjacent to 4 5
    3. vertex 3 adjacent to 1 5
    4. vertex 4 adjacent to 1 2
    5. vertex 5 adjacent to 1 2 3
  - Singular graph with  $|Aut(CUTP(G))| = 128$  and  $|ARes(G)| = 32$ :
    1. vertex 1 adjacent to 3 4 5
    2. vertex 2 adjacent to 4 5
    3. vertex 3 adjacent to 1 5

- 4. vertex 4 adjacent to 1 2 5
- 5. vertex 5 adjacent to 1 2 3 4
- Singular graph with  $|Aut(CUTP(G))| = 256$  and  $|ARes(G)| = 32$ :
  - 1. vertex 1 adjacent to 3 4 5
  - 2. vertex 2 adjacent to 5
  - 3. vertex 3 adjacent to 1 4 5
  - 4. vertex 4 adjacent to 1 3
  - 5. vertex 5 adjacent to 1 2 3
- Singular graph with  $|Aut(CUTP(G))| = 2304$  and  $|ARes(G)| = 96$ :
  - 1. vertex 1 adjacent to 3 4 5
  - 2. vertex 2 adjacent to 5
  - 3. vertex 3 adjacent to 1 4 5
  - 4. vertex 4 adjacent to 1 3 5
  - 5. vertex 5 adjacent to 1 2 3 4
- Singular graph with  $|Aut(CUTP(G))| = 256$  and  $|ARes(G)| = 64$ :
  - 1. vertex 1 adjacent to 3 4 5
  - 2. vertex 2 adjacent to 4 5
  - 3. vertex 3 adjacent to 1 4 5
  - 4. vertex 4 adjacent to 1 2 3 5
  - 5. vertex 5 adjacent to 1 2 3 4
- Singular graph with  $|Aut(CUTP(G))| = 256$  and  $|ARes(G)| = 64$ :
  - 1. vertex 1 adjacent to 3 4 5
  - 2. vertex 2 adjacent to 3 4 5
  - 3. vertex 3 adjacent to 1 2 5
  - 4. vertex 4 adjacent to 1 2
  - 5. vertex 5 adjacent to 1 2 3