

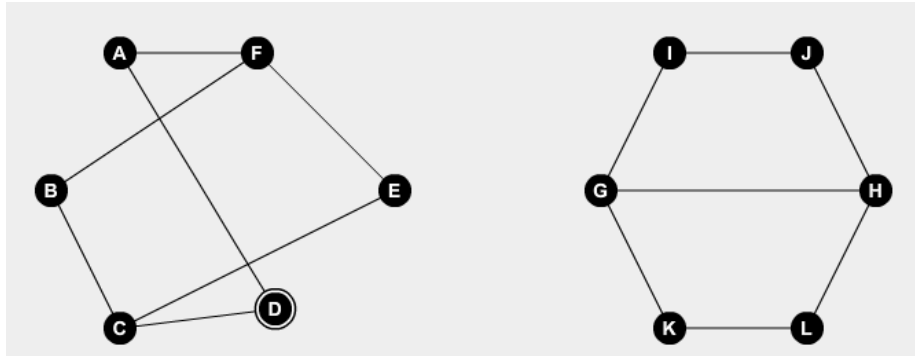
3. Find the smallest natural x such that

$$3^{100}x \equiv 3 \pmod{25}$$

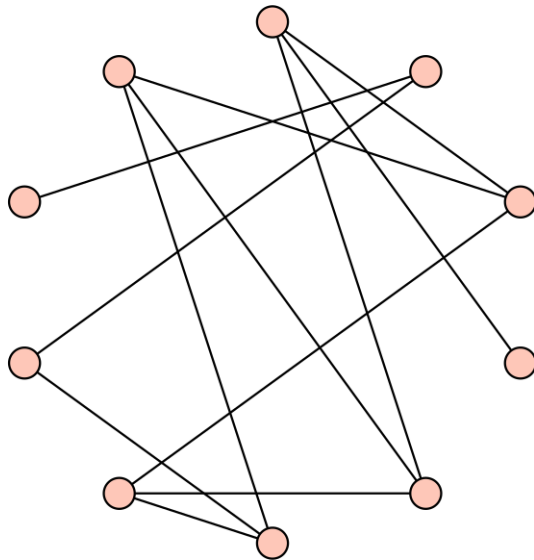
$$3x \equiv 1 \pmod{4}$$

4. How many three digit odd numbers (100-999 and odd) have either no repeated digits or are a multiple of 5?

5. Are the following graphs isomorphic? If so, indicate the vertex correspondence. If not, give a reason why.



6. Is the following graph bipartite? If yes, label groups. If no, show problem node.



7. What was its degree sequence?

Extra Credit Is this graph Hamiltonian?

