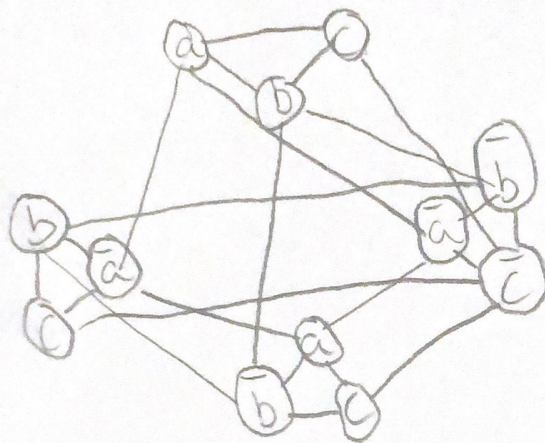


1.



2. We need to determine if there exists an independent set of size k , where $k \leq$ the number of vertices

3. The largest independent set in this graph is 3.