

Graph Theory: List of Theorems

- A graph G is bipartite if and only if it contains no odd cycle.
- Cayley's Formula
- Mader's Theorem.
- Euler's Theorem.
- Dirac's Theorem.
- The Chvátal-Erdős Theorem.
- Hall's Theorem.
- In any bipartite graph, the maximum size of a matching is equal to the minimum size of a vertex cover.
- Tutte's Theorem.
- Petersen's Theorem.
- The chromatic index of any bipartite graph is equal to its maximum degree.
- Vizing's Theorem.
- Brooks' Theorem.
- Turán's Theorem.
- Ramsey's Theorem.
- Erdős' lower bound for the Ramsey number $r(k, k)$.
- Euler's Formula for planar connected graphs.