

Definition. A graph G is n-partite

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Proof.

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Proof. Consider the spanning tree.

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Proof. Consider the spanning tree. Choose a vertex on the tree. \Box

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Theorem. A graph that does not contain a cycle of odd length is bipartite.

Proof. Consider the spanning tree. Choose a vertex on the tree. Split into odd and even distance away from v...

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Theorem. A connected graph has an Euler trail if and only if it has at most two odd vertices.

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Theorem. A connected graph is Euler if and only if it is the union of "edge disjoint" cycles.

Fleury's algorithm

- 1. Choose any vertex. $W_0 = v$
- 2.

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