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Ore's theorem

Canonical name	OresTheorem
Date of creation	2013-03-22 11:52:40
Last modified on	2013-03-22 11:52:40
Owner	Koro (127)
Last modified by	Koro (127)
Numerical id	10
Author	Koro (127)
Entry type	Theorem
Classification	msc 05C45
Classification	msc 18D20
Related topic	HamiltonianGraph
Related topic	BondyAndChvatalTheorem

Let G be a simple graph of order $n \geq 3$ such that, for every pair of distinct non adjacent vertices u and v, $\deg(u) + \deg(v) \geq n$. Then G is a Hamiltonian graph.