ASSIGNMENT 0

ALEX CAMERON

Theorem 1. *Let G be a graph (a graph is a set of vertices and a set of edges between vertices where edges are really an antireflexive and symmetric relation on the vertices) and let $\{v_1, \ldots, v_k\}$ be the vertices of G with odd degree, where degree means the number of vertices that a particular vertex is adjacent to with an edge, then k is even.*

Proof. If you count up all of the degrees of all the vertices of G, then you've counted every edge twice so that sum is even which means the sum of the degrees of vertices of odd degree is even. □