
KERRY OJAKIAN, Bronx Community College (C.U.N.Y.)

Graphs that are cop-win, but not zombie-win

In the zombie variant of the game of cops and robbers, the cops must always move closer to the robber on their turn. We define cop-win graphs in the usual way: graphs on which one cop can win. We define zombie-win graphs as follows: graphs on which one zombie can win from any start position. We say that a graph is cop-zombie gap if it is cop-win, but not zombie-win. We investigate a number of questions related to the cop-zombie gap graphs, such as describing the minimum cop-zombie gap graphs.