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*Characterizations of  $k$ -copwin graphs*

We give two characterizations of the graphs on which  $k$  cops have a winning strategy in the Cops and Robber game. These generalize the corresponding characterizations in the one cop case. In particular, we give a relational characterization of  $k$ -copwin graphs, for all finite  $k$ , and a vertex elimination order characterization of such graphs. Our results hold for variations of the game and some extend to infinite graphs. This is joint work with Gary MacGillivray.