

# Maker Can Construct a Sparse Graph on a Small Board

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We study Maker/Breaker games on the edges of sparse graphs. Maker and Breaker take turns in claiming previously unclaimed edges of a given graph  $H$ . Maker aims to occupy a given target graph  $G$  and Breaker tries to prevent Maker from achieving his goal. We define a function  $f$  and show that for every  $d$ -regular graph  $G$  on  $n$  vertices there is a graph  $H$  with at most  $f(d)n$  edges such that Maker can occupy a copy of  $G$  in the game on  $H$ .

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