

Math 331: Problem Solving

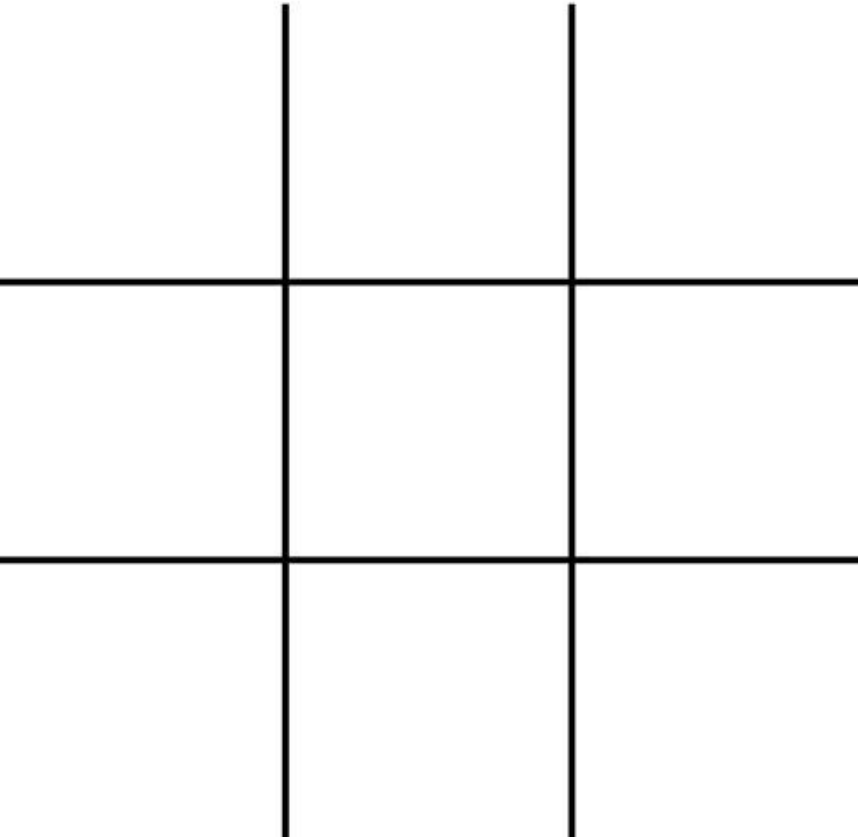
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Second Remote Participation Lecture
April 26, 2017

RECTANGLE GAME: Consider $M \times N$ board, take turns, each turn can break any piece along one horizontal or along one vertical, last one to break a piece wins. Does someone have a winning strategy?

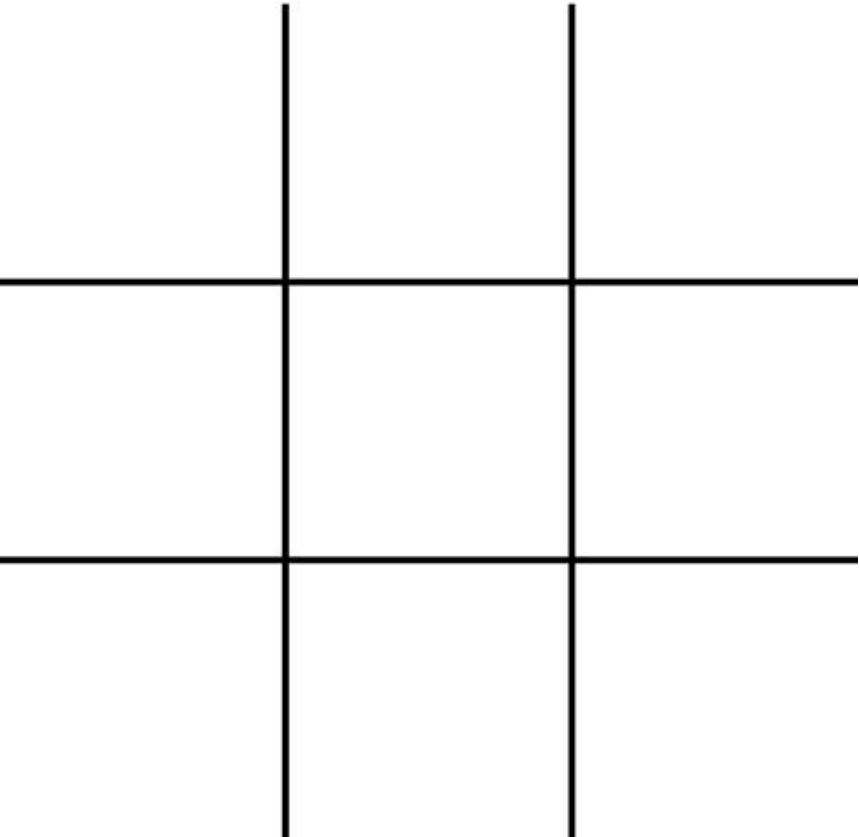


tic tac toe



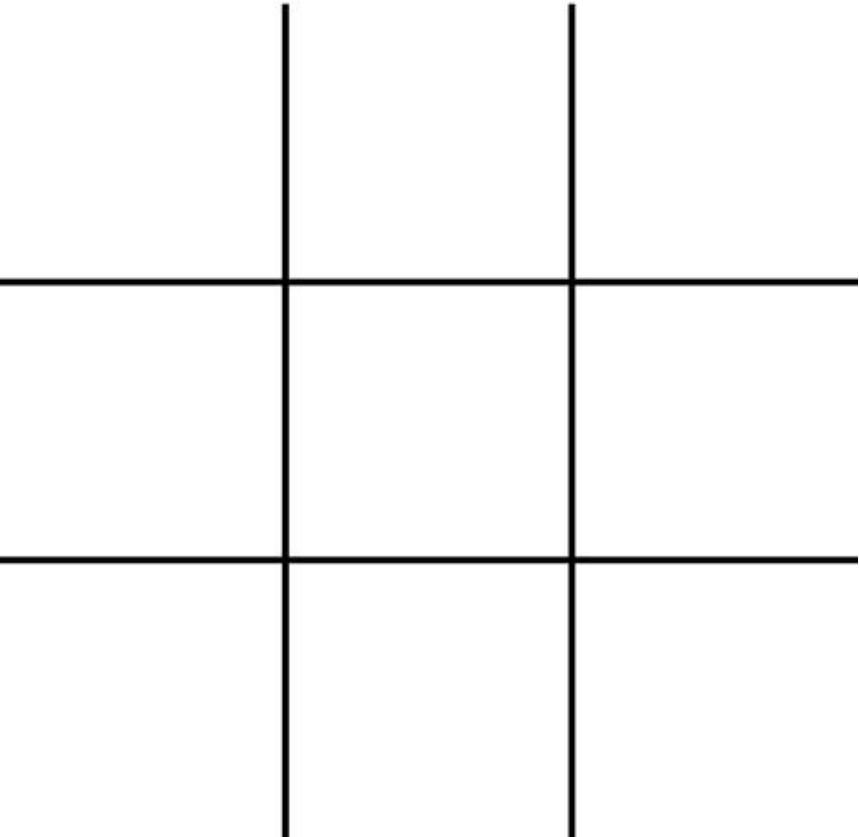
Move	#1's Money	#2's Money	#1's Bid	#2's Bid
1				
2				
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12				
13				

tic tac toe



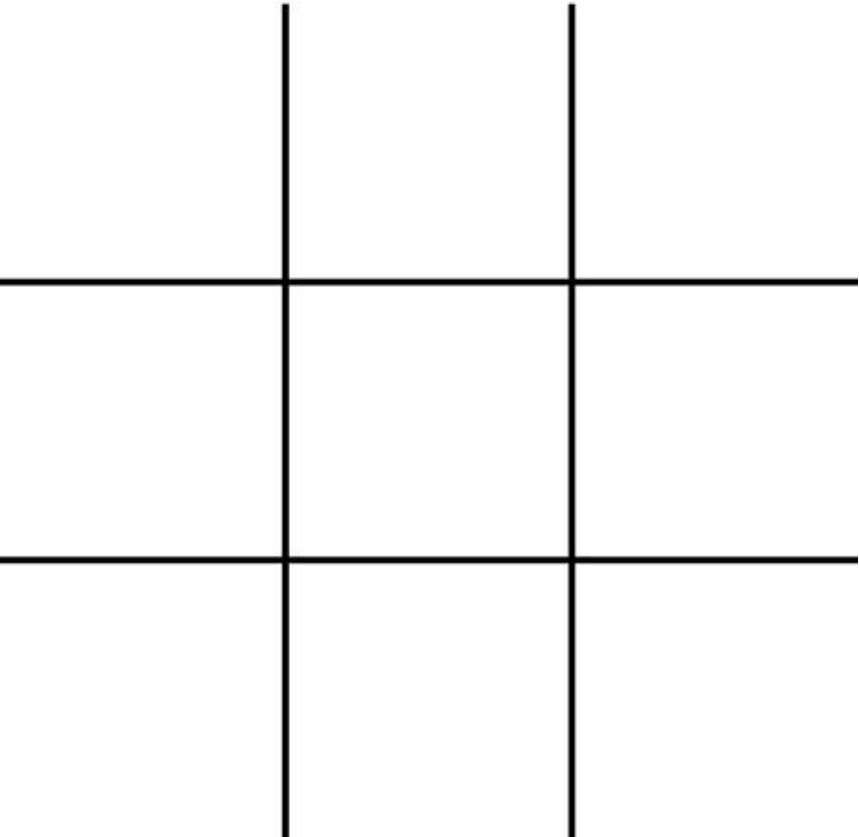
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tic tac toe



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Castle game: Have castles labeled 1 through 10 (label is value), divide 100 soldiers to attack the castles against an opponent, whomever sends more to a castle wins it. What strategy is best to get more points than opponent?

[illegible]

[illegible]

[illegible]

