

## **Linear Polyomino Achievement**

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For a given set  $P = \{p_1, \dots, p_n\}$  of integers the following achievement game will be considered. Two players  $A$  (first move) and  $B$  alternately color the integers. Player  $A$  wins if he achieves a copy of  $P$  (that is  $\{p_1 + k, \dots, p_n + k\}$  or  $\{k - p_n, \dots, k - p_1\}$  for an integer  $k$ ) in his color and  $B$  wins otherwise. The polyomino  $P$  is called a winner if there exists a winning strategy for  $A$ . Otherwise there exists a strategy for  $B$  to prevent  $A$  from winning and then  $P$  is called a loser.

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