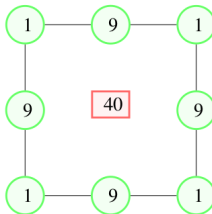


Puzzle time - on adversarial search

The courageous garrison

A courageous garrison was defending a snow fort. The commander arranged his forces as shown in the square frame (the inner square showing the garrison's total strength of 40 boys): 11 boys defending each side of the fort. The garrison "lost" 4 boys during each of the first, second, third, and fourth assaults, and 2 during the fifth and last. But after each charge 11 boys defended each side of the snow fort. How? (puzzle 101 from Kordemsky. The Moscow Puzzles - 359 mathematical recreations)



1st attack: 36 brave defenders
2nd attack: 32 brave defenders
3rd attack: 28 brave defenders
4th attack: 24 brave defenders
5th attack: 22 brave defenders