

## Analysis of "Number Territory" for Originality

### Summary of the Game Mechanic

"Number Territory" is a turn-based, two-player strategy game played on a grid of numbers. Players take turns claiming unclaimed numbers, and when a number is claimed, the player also automatically claims all orthogonally and diagonally adjacent unclaimed numbers that are factors or multiples of the chosen number. After the first move, players may only claim numbers adjacent to their territory. The winner is the player who claims the most numbers when no valid moves remain<sup>[1]</sup>.

### Comparison to Existing Games

#### 1. Factor Game and Factor Captor

- *Factor Game*: In this classroom math game, players take turns choosing numbers from a board. When a player selects a number, the opponent claims the proper factors of that number from the remaining unclaimed numbers. The game ends when no more numbers with uncircled factors remain, and the player with the highest sum of factors wins<sup>[2]</sup>.
- *Factor Captor*: A similar educational game involving claiming numbers and their factors, commonly cited in math education resources<sup>[2]</sup>.

#### Key Differences:

- In Factor Game/Factor Captor, the focus is on factors only, not multiples, and the claiming mechanism is not spatial (no grid or adjacency rules).
- "Number Territory" uniquely combines both factors and multiples, and introduces a spatial, territory-control element on a grid, with adjacency as a core mechanic<sup>[1]</sup>.

#### 2. Territory Control Board Games (Go, Othello, Risk, etc.)

- Games like Go, Othello, and Risk use territory acquisition as a core mechanic, with players expanding their control on a board through adjacency and strategic placement<sup>[3]</sup>.
- However, these games do not incorporate mathematical relationships between numbers as the basis for claiming territory.

#### Key Differences:

- While the territory control concept is not new, the specific method of expansion in "Number Territory"—using mathematical relationships (factors and multiples) between numbers on a grid—is not found in traditional territory games<sup>[1] [3]</sup>.

### 3. Other Mathematical Games

- No references were found to existing games that combine a grid-based territory control mechanic with the simultaneous use of both factors and multiples as the basis for expansion.

### Conclusion: Is "Number Territory" a New Game?

- **No direct match was found** in the literature or game references for a game that combines:
  - A grid-based territory control system,
  - Expansion based on both factors and multiples,
  - Adjacency as a requirement for moves after the first turn,
  - Automatic claiming of all qualifying adjacent numbers<sup>[1] [2] [3]</sup>.
- The closest existing games (Factor Game, Factor Captor) are educational math games focusing on factors only, with no spatial/territorial element<sup>[2]</sup>.
- Classic territory games (Go, Othello, Risk) use adjacency and territory, but not mathematical relationships between numbers<sup>[3]</sup>.

**Therefore, "Number Territory" appears to be an original game concept that combines elements from both mathematical and territory-control genres in a novel way.** No existing game matches its core mechanics as described<sup>[1] [2] [3]</sup>.

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1. [https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/39166379/4d50713b-1c05-4939-bf0a-b16dbce31291/Number-Territory\\_-A-Strategic-Mathematical-Territo.md](https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/39166379/4d50713b-1c05-4939-bf0a-b16dbce31291/Number-Territory_-A-Strategic-Mathematical-Territo.md)
2. [https://mathsolutions.com/ms\\_classroom\\_lessons/factor-game/13890/](https://mathsolutions.com/ms_classroom_lessons/factor-game/13890/)
3. [https://www.reddit.com/r/gamedesign/comments/aoedns/territory\\_acquisition\\_mechanic/](https://www.reddit.com/r/gamedesign/comments/aoedns/territory_acquisition_mechanic/)