Prime Squares Game

KitKat Addicts

Game Description

- The game progresses in the form of tic-tac-toe
- Start with an empty 3 x 3 n square
- Each player alternately fills a square with a number (except the last move is given to player 2)
- Whenever a number fills allows a 3 digit number to form (along row, column or diagonal, in any direction), the number of primes formed as a consequence are added to the player’s score
- 0 is not allowed to be placed in any of the border cells

7	6	9
9	5	3
7	9	7

Gameplay In Acton - Move 1

	5	

Player 1	Player 2
Plays 5 at center Total = 0 points	Total = 0 points

Gameplay In Acton - Move 2

	6	
	5	

Player 1	Player 2
Total = 0 points	Plays 6 at center top Total = 0 points

Gameplay In Acton - Move 3

	6	
	5	
	9	

Player 1	Player 2
Plays 9 at center bottom 659 is a prime(+1) Total = 1 points	Total = 0 points

Gameplay In Acton - Move 4

	6	9
	5	
	9	

Player 1	Player 2
Total = 1 points	Plays 9 at right top Total = 0 points

Gameplay In Acton - Move 5

7	6	9
	5	
	9	

Player 1	Player 2
Plays 7 at left top 769 is a prime(+1) Total = 2 points	Total = 0 points

Gameplay In Acton - Move 6

7	6	9
	5	
	9	7

Player 1	Player 2
Total = 2 points	Plays 7 at right bottom 757 is a prime(+1) 757 is a prime(+1) (Why?) Total = 2 points

Gameplay In Acton - Move 7

7	6	9
	5	
7	9	7

Player 1	Player 2
Plays 7 at left bottom 797 is a prime(+1) 797 is a prime(+1) Total = 4 points	Total = 2 points

The disadvantage of Player 2 is evident, how to rectify it?

By giving both the last two turns to Player 2

Gameplay In Acton - Move 8

7	6	9
9	5	
7	9	7

Player 1	Player 2
Total = 4 points (locked)	Plays 9 at left center 797 is a prime(+1) 797 is a prime(+1) Total = 4 points

Gameplay In Acton - Final Move

7	6	9
9	5	3
7	9	7

Player 1	Player 2
Total = 4 points (locked)	Plays 3 at right center 953 is a prime(+1) 359 is a prime(+1) 937 is a prime(+1) 739 is a prime(+1) Total = 8 points

Feature Upgrades

- Two games that alternates the player that starts. Winner is the player with the maximum sum of points across the two games.
- N x N squares instead of 3 x 3
- Consider attributing points for primes formed along the diagonal of length != N
- Sudoku Style Game:
  - In 3x3: no repetition of digits anywhere
  - In NxN (N <= 9): no repetition of digits along rows/columns
- Additional points if sum of numbers along the row/column/diagonal forms a prime
- Additional points if the final square is a magic square