Square Game Rules

Welcome to the Square Game.

The object of this game is to find a hidden point on a 1,000,000 x 1,000,000 grid. Each round you will receive a random point on the grid and create a square. If the hidden point is within your square, you'll get a hit, otherwise a miss. After 100 rounds, you must guess the hidden point.

Rules

- Grid size: 1,000,000 x 1,000,000
- Create 100 squares per match
- Win 10 games in a row to get the flag
- A 1% tolerance (+/- 10,000) is allowed for your guess

Input radius length as a positive integer.

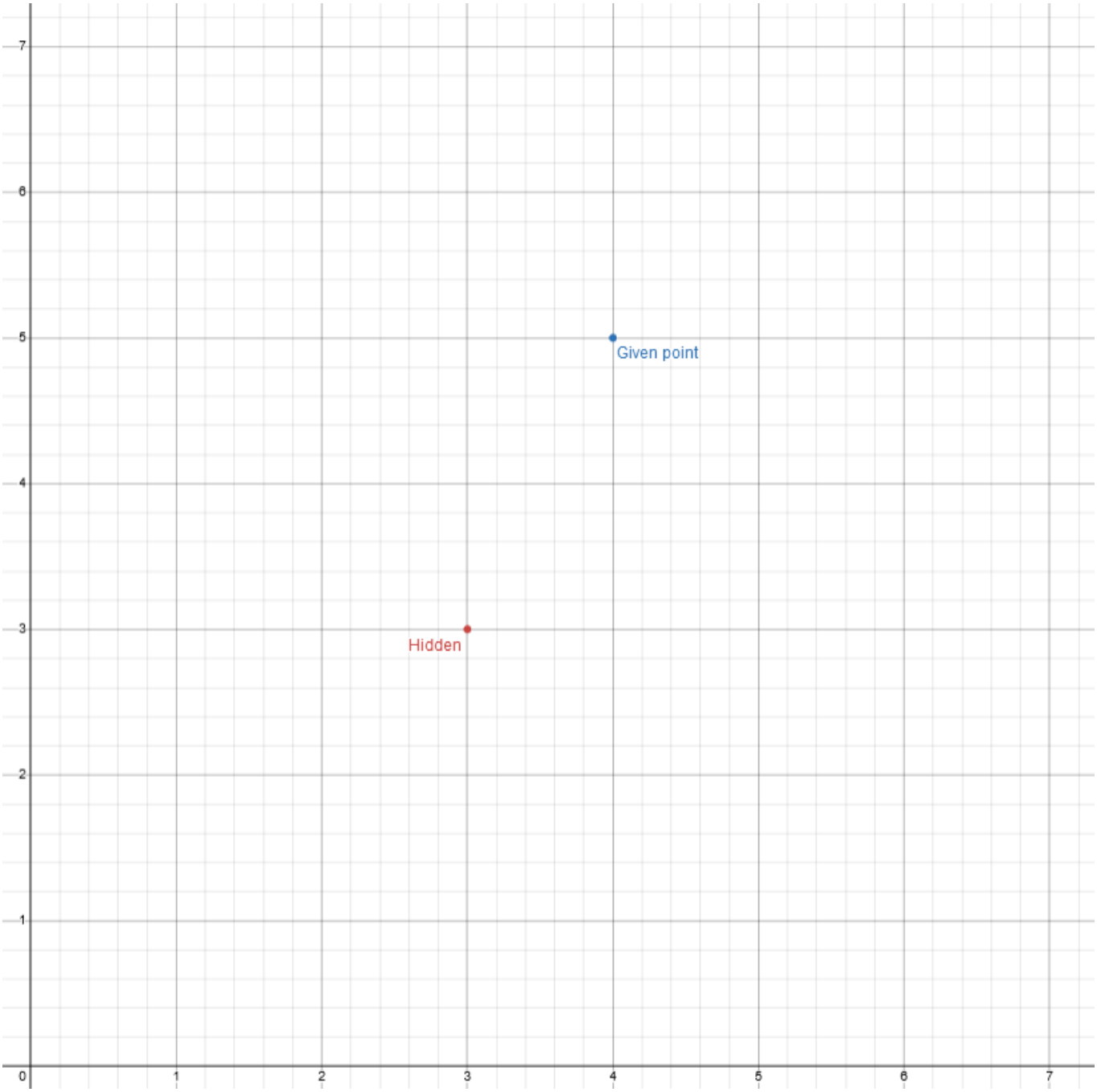
```
┌──(kali㉿kali)-[~]
└─$ nc localhost 1234
Welcome to the Point Locator Challenge!

The object of this game is to find the coordinates of a hidden point on the grid.
Each round you will be given a new random point on the grid and you will give us a radius of a square.
We will return if the hidden point was in the area of your square.
After 100 rounds you will be asked to submit your guess of the coordinates of the hidden point x,y.
To win you will have to win 10 games in a row.

The size of your grid is 1000000, 1000000

You have an error of 10000.0

Number of games you must win: 10
Number of rounds per game: 100

***Game: 1***
Round 1: Point is (527384, 621814)
Enter Radius Length> 500000
The hidden point is inside your square!
```

Input guess as comma separated integers.

```
Guess the hidden point (format 'x,y'): 578257, 614826
Correct! You've found the hidden point.
```

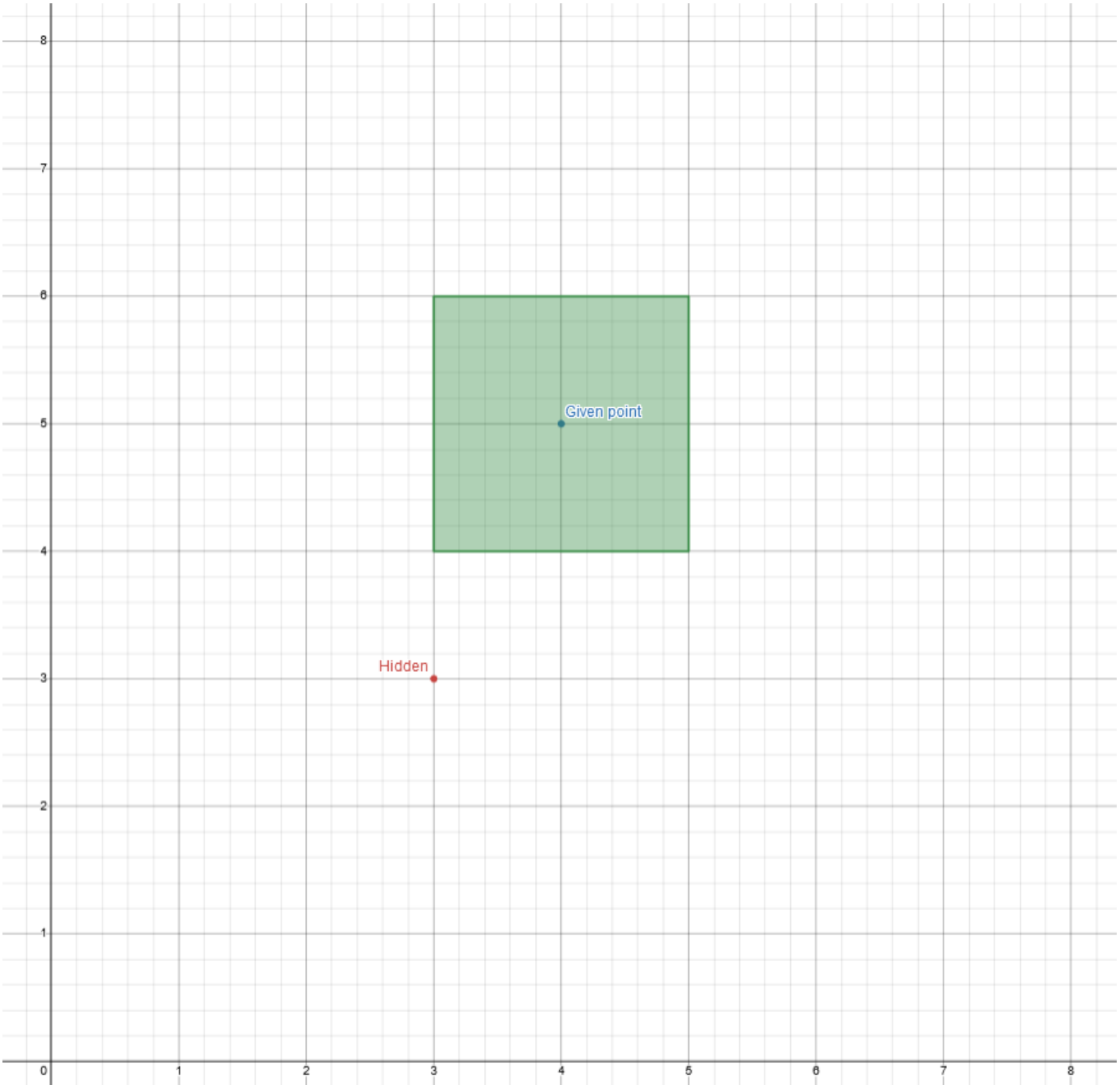
Mini Example

As an example imagine a game played on a smaller 10x10 grid. A point is hidden from the player at coordinates (3,3), and the player's goal is to guess this location. A random point is chosen, for example, (4,5), and the player must then specify a radius. In this context, "radius" refers to the four points at the coordinates (±x, ±y).

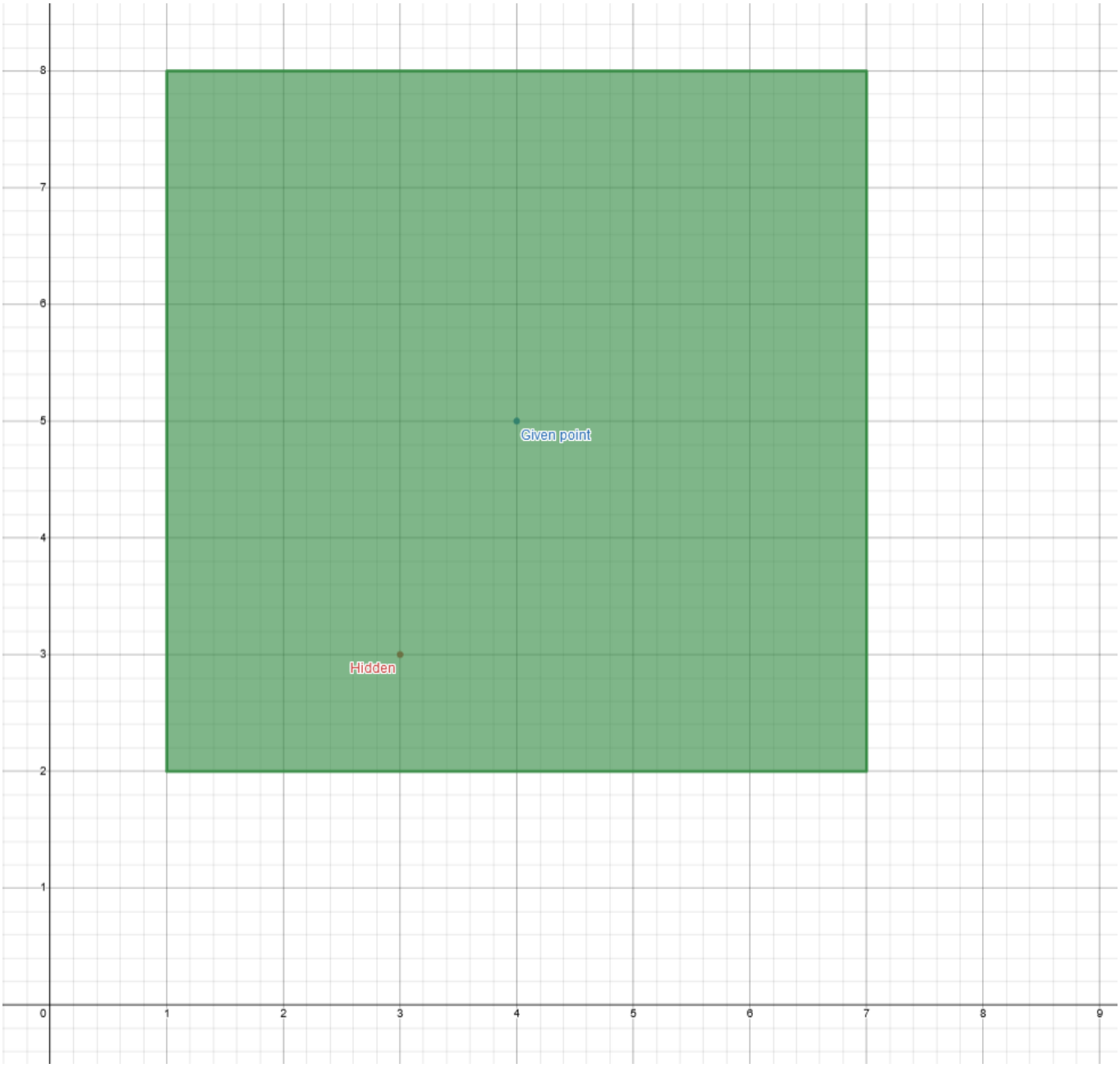


When the player inputs a radius of 1, we test to see if the hidden point is within the area of the resulting square. If the hidden point is not within this

area, it is considered a miss. Shown below.



If the the player would have guessed 3 for the radius. It would have resulted in a hit since the hidden point falls within the area of the square.



The objective is to use the feedback from 100 iterations to deduce the location of the hidden point.