The red dot represents one of the three targets. If the graph has any points that is within the circle, then the target is counted as being hit. In these test cases I run the program and then calculate the power so it matches the test case description.

– the projectile graph goes through the target.

Input:

Enter power between 1 and 100: 43.5
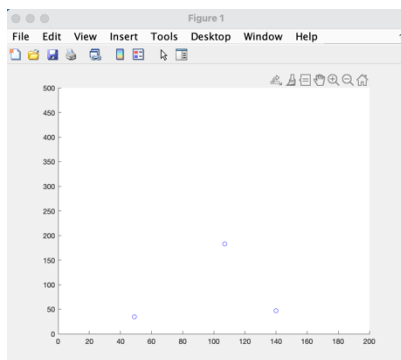
Expected Output:

- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]
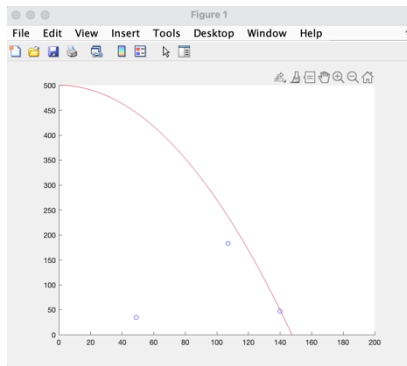

• The following graph with the 3 random targets

- You WIN!

Actual OutPut:

- You WIN!

- The graph goes through the circumference of the acceptable region (just inside the region)

Input:
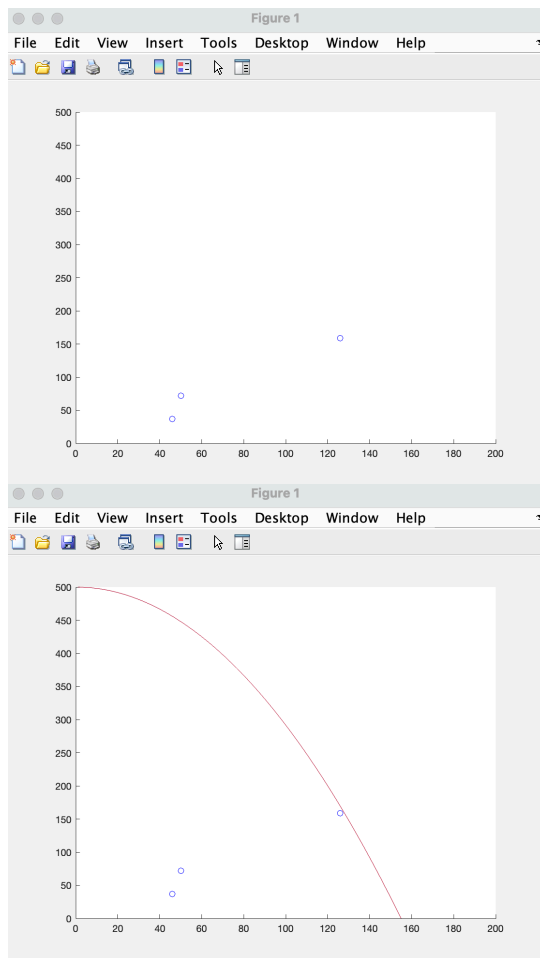
Enter power between 1 and 100: 48

Expected Output:

- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]

• The following graph with the 3 random targets

- You WIN!

Actual Output:

- You WIN!

Test case 3 – The graph just goes outside the region (very close to the region the target is accepted but still not inside)

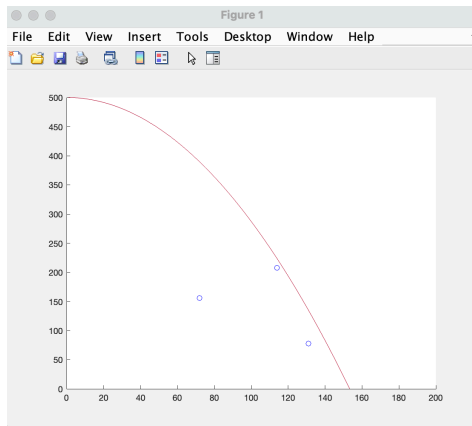Input:
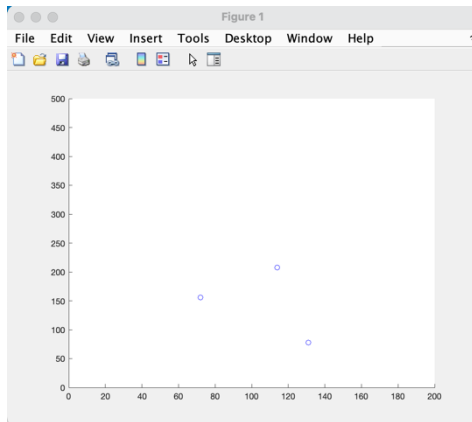
Enter power between 1 and 100: 47

Expected Output:

- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]

• The following graph with the 3 random targets

- You lose

Actual Output:

- You lose

– projectile graph outside the acceptable region
Input:
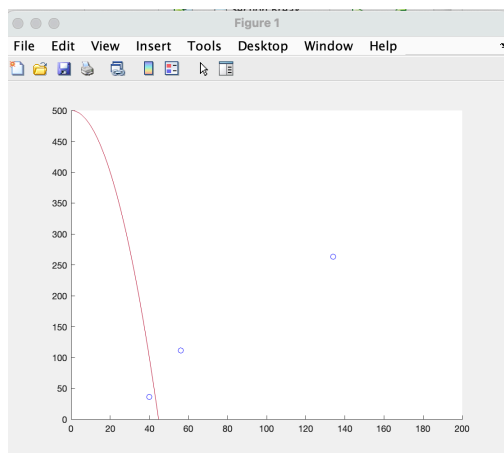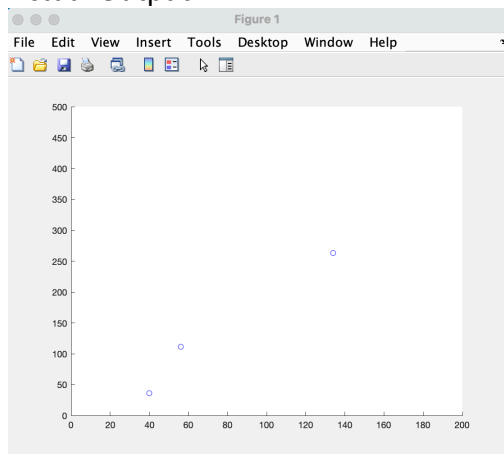Enter power between 1 and 100: 4
Expected Output:
- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]

• The following graph with the 3 random targets

- You lose

Actual Output:

- You lose

- The graph goes through the circumference of the acceptable region (just inside the region)

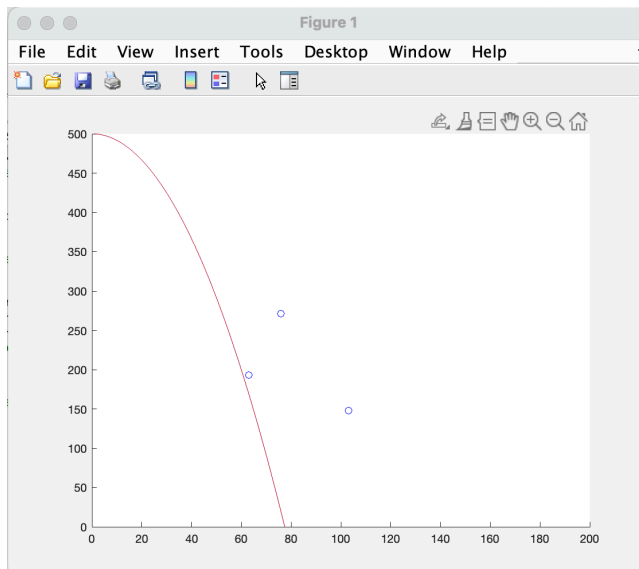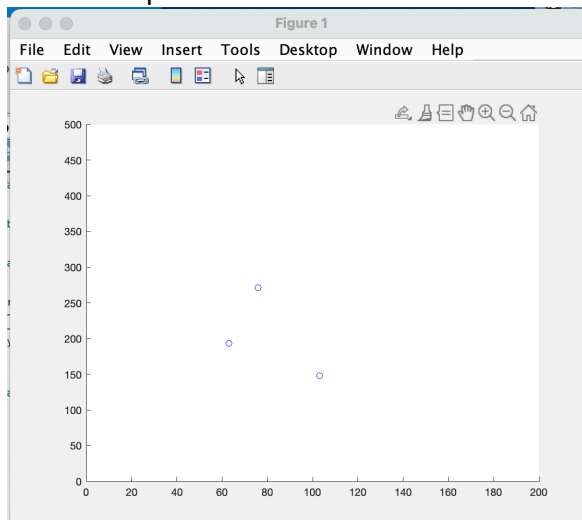Input:

Enter power between 1 and 100: 12

Expected Output:

- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]

• The following graph with the 3 random targets

- You WIN!

Actual Output:

- You WIN

– The graph just goes outside the region (very close to the region the target is accepted but still not inside)

Input:

Enter power between 1 and 100: 30
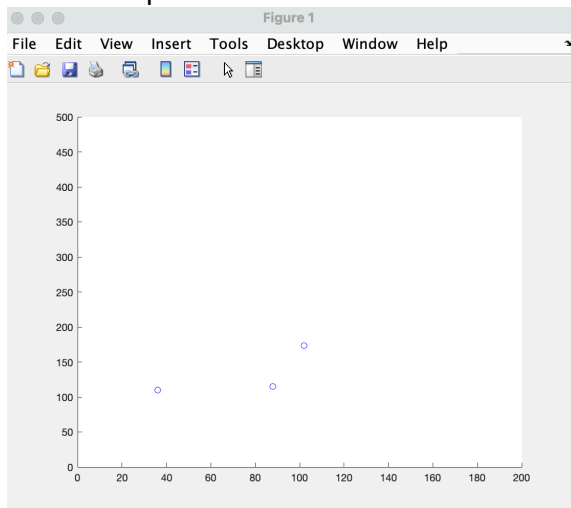
Expected Output:

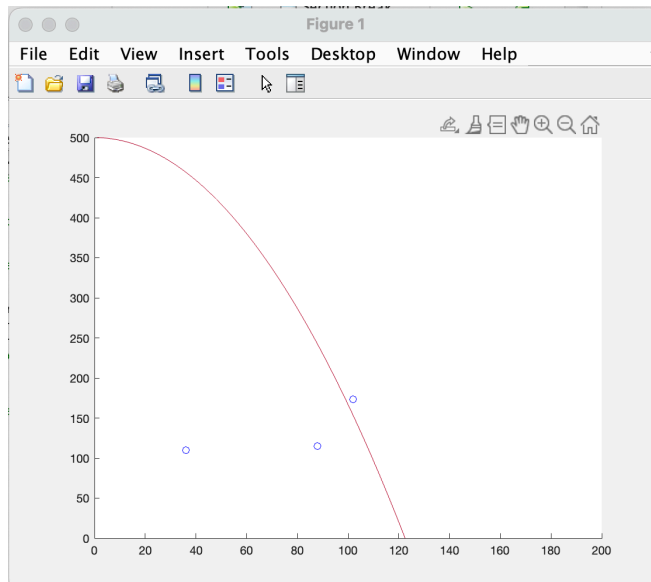- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]

• The following graph with the 3 random targets

- You lose

Actual Output:

- You lose

Test case 7 – Projectile graph outside the acceptable region (very far away from the target)
Input:
Enter power between 1 and 100: 100
Expected Output:
- A graph with 3 random points with x coordinates in the range [30:140] and y coordinates within the range [0:275]
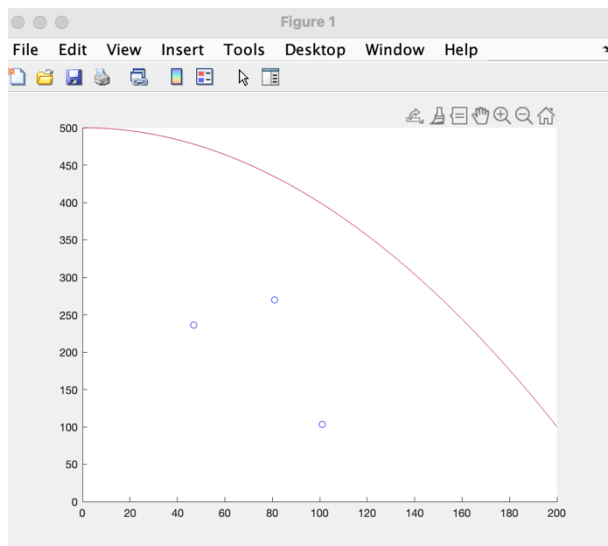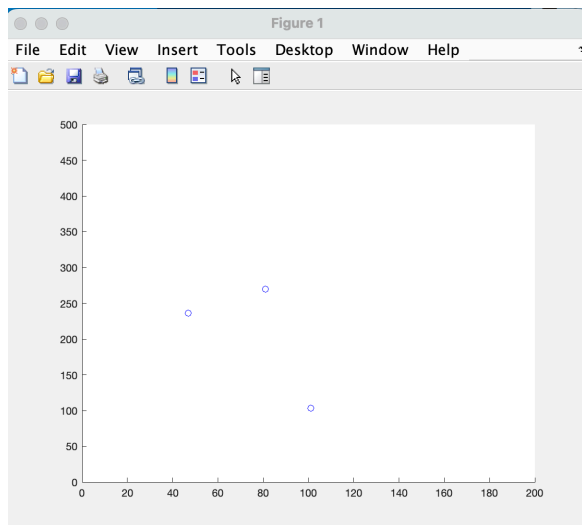

• The following graph with the 3 random targets

- You lose
Actual Output:

- You lose