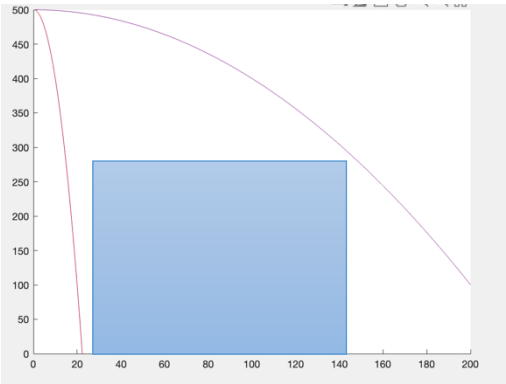
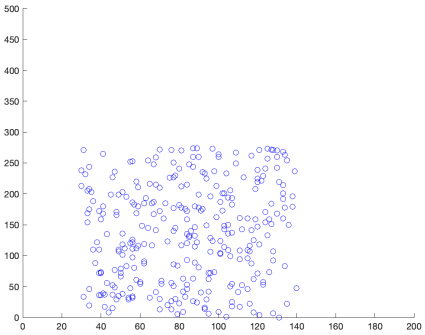
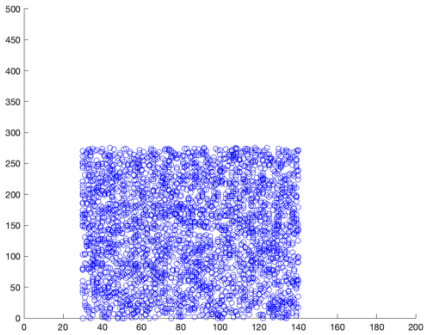


The red line represents the trajectory with power set as minimum (1) and purple shows the trajectory with the power set as maximum (100), so the function generateRandomTargets only randomly generates the x coordinates in the range [30:140] y coordinates within the range [0:275] so the targets generated are within the region that can be hit only.

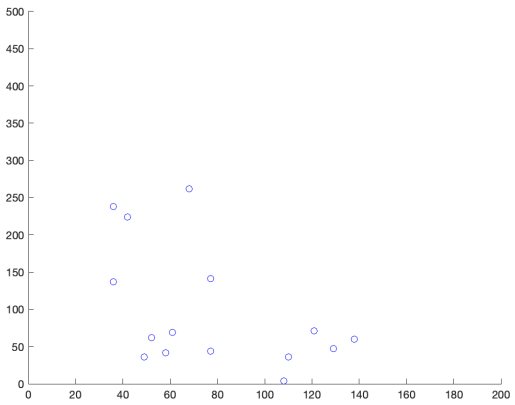


Picture1: testTarget3.png

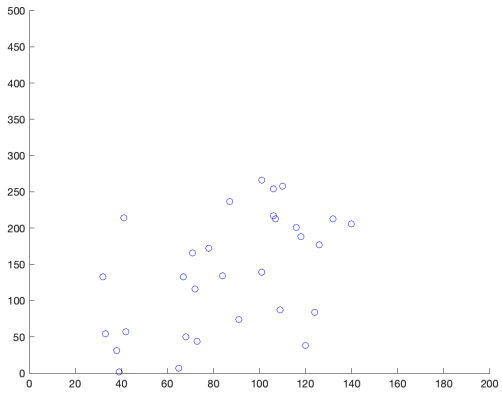


Picture2: testTarget4.png

These two images show that the points are within the allowed region. Picture 1 shows the 3 targets generated 100 times and picture 2 shows the targets generated 1000 times. There are no points(targets) outside the allowed region so the function generateRandomTargets creates targets(points) within the correct region and the plotTargets function correctly plots them.



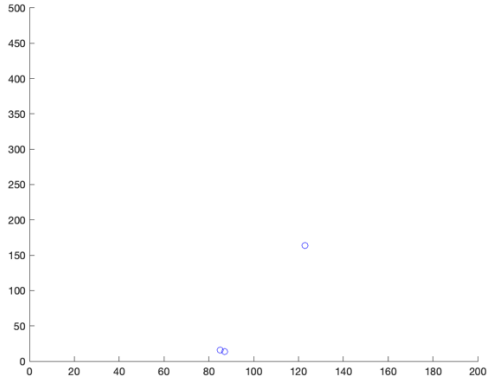
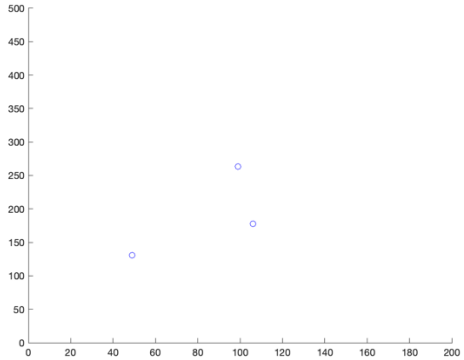
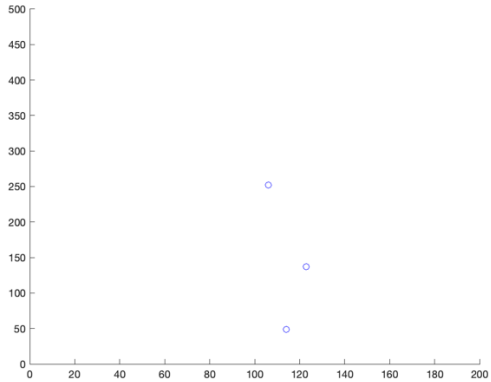
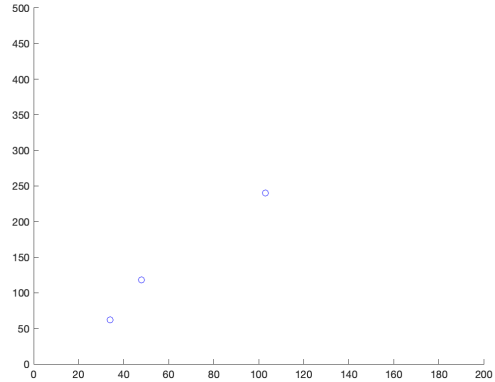
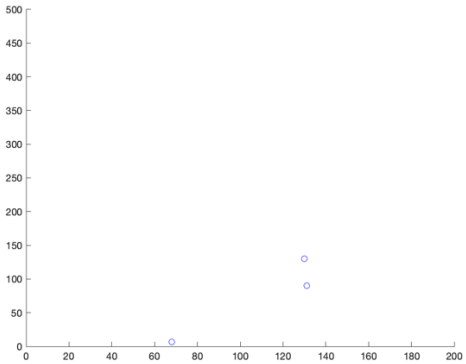
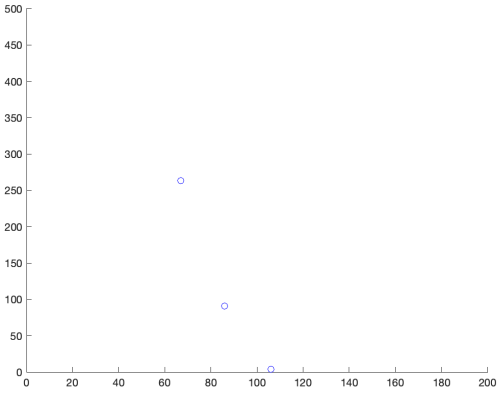
Picture3: testTarget1.png

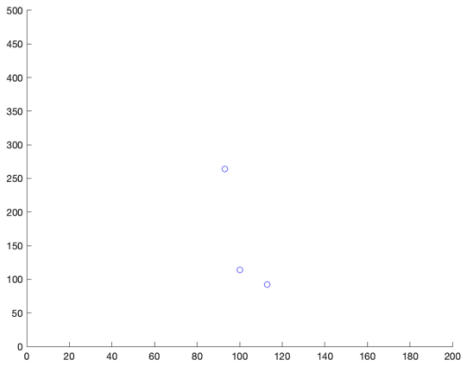


Picture4: testTarget2.png

The two pictures show that the targets are within the correct region as the two functions (generateRandomTargets and plotTargets) was called 10 and 50 times respectively and no points are outside the allowed region, and the points are generated randomly as the points on the graph are scattered.

The below pictures are testTargetRand1.png to testTargetRand10.png. By observing the graphs of the targets plotted we can tell the points are generated randomly. So, the functions generateRandomTargets and plotTargets are working as expected.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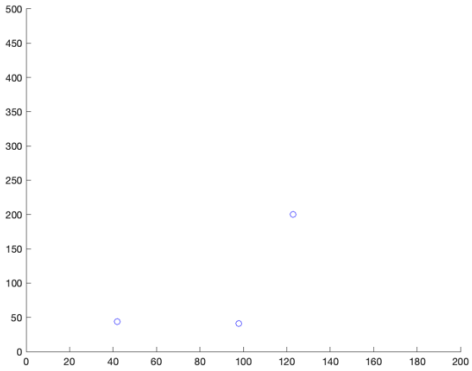
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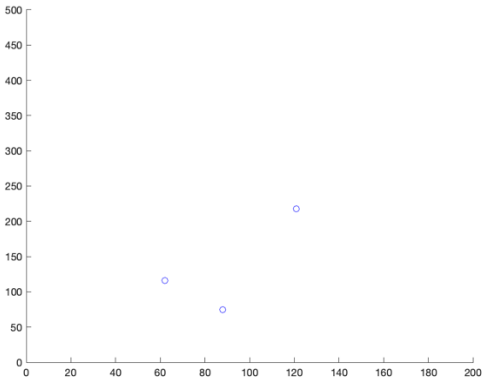
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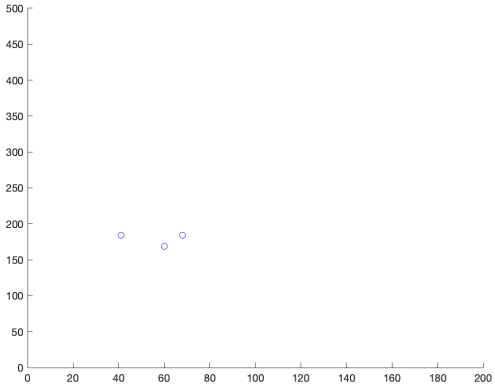
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