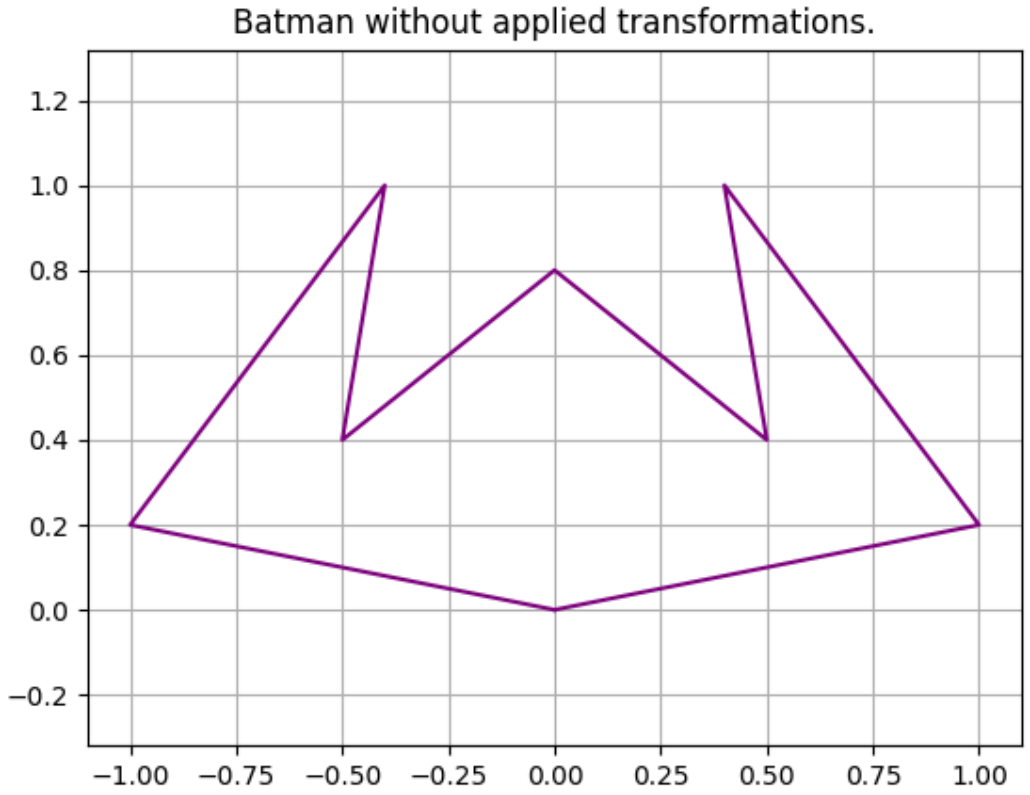
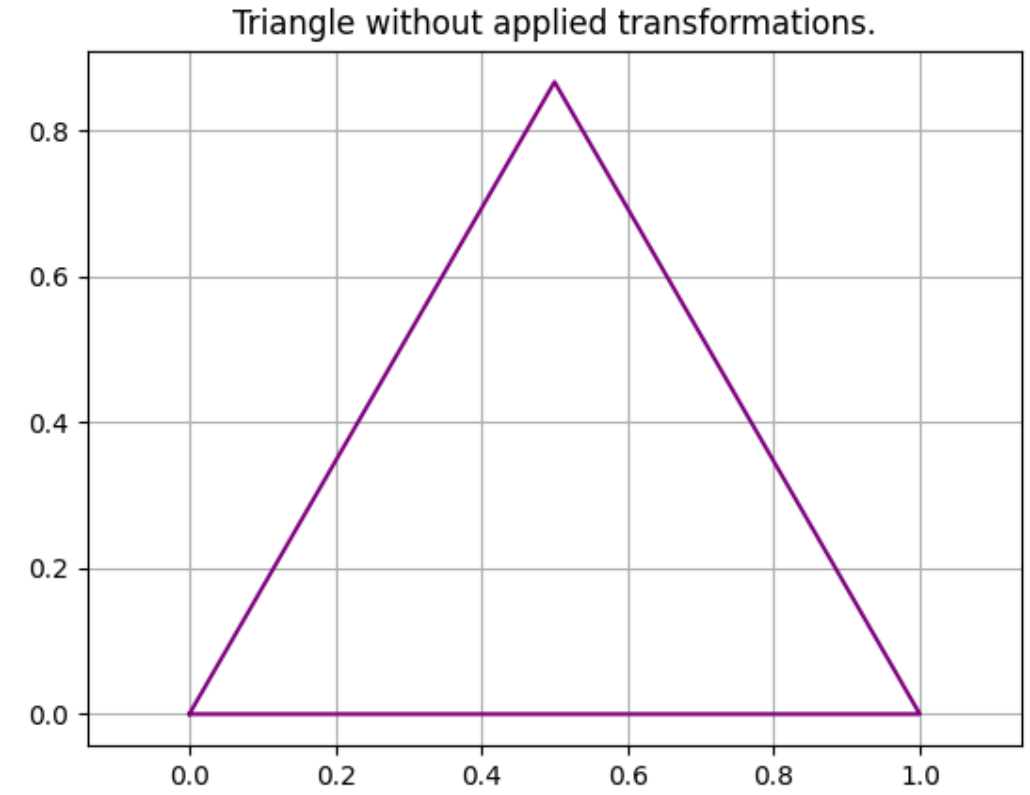
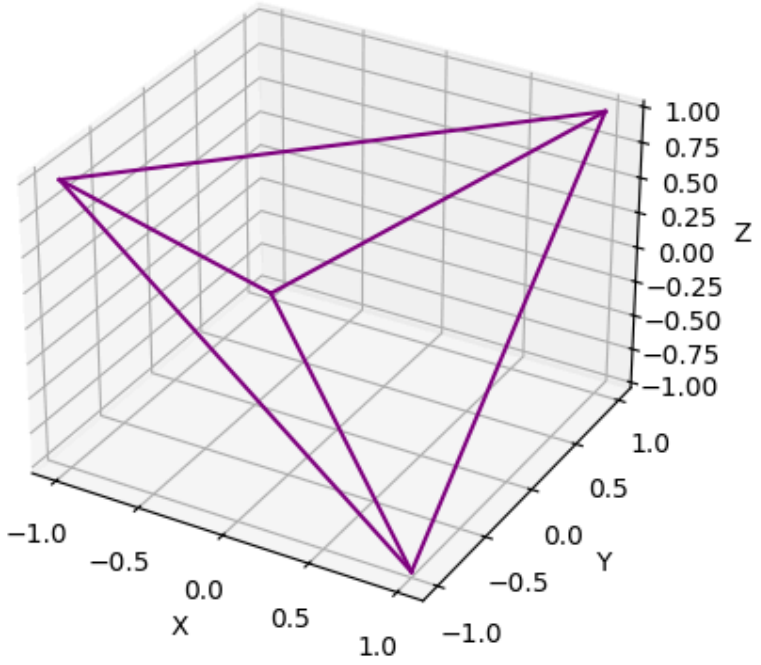
Part 1

Execution results:

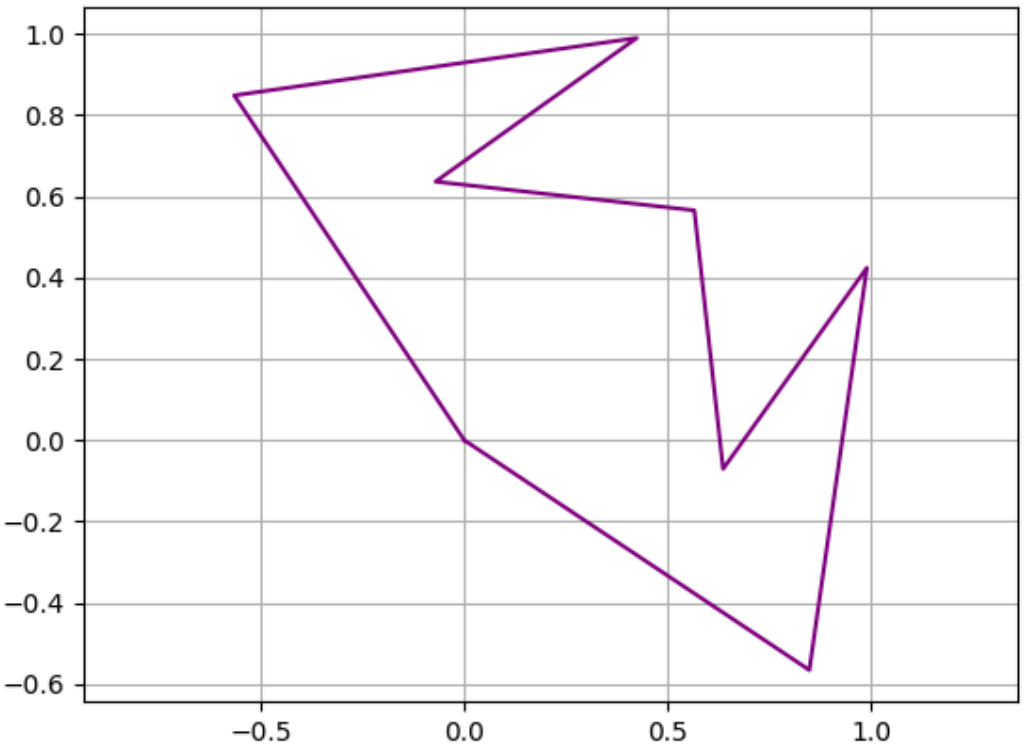


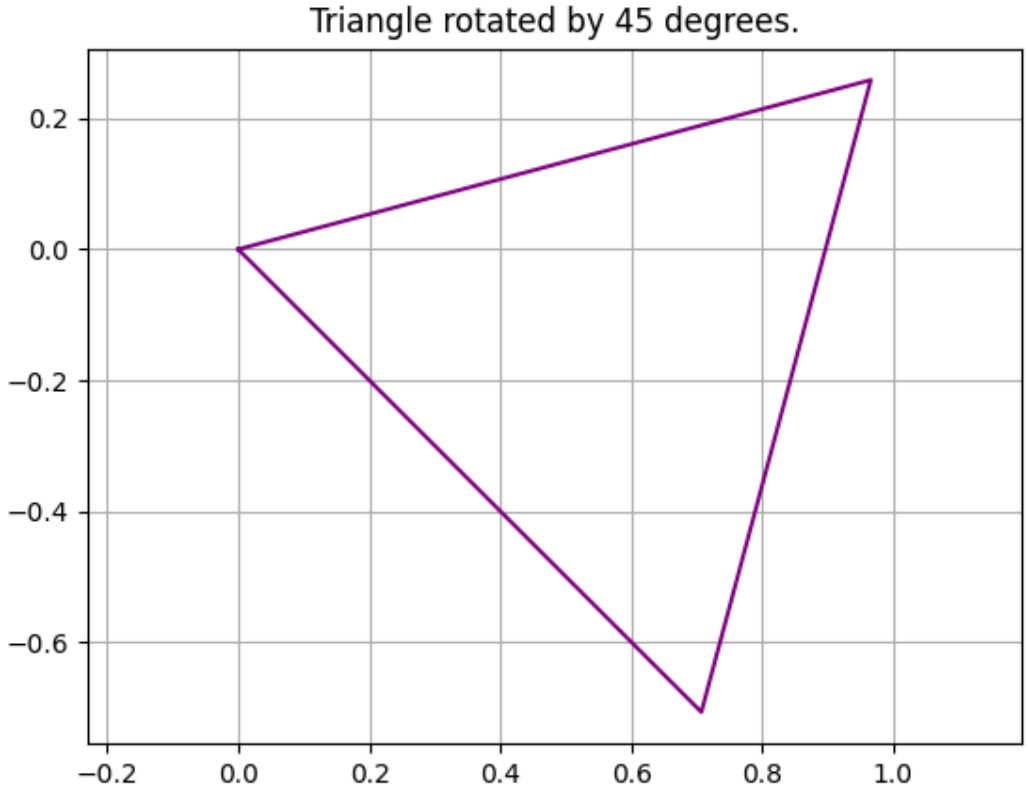


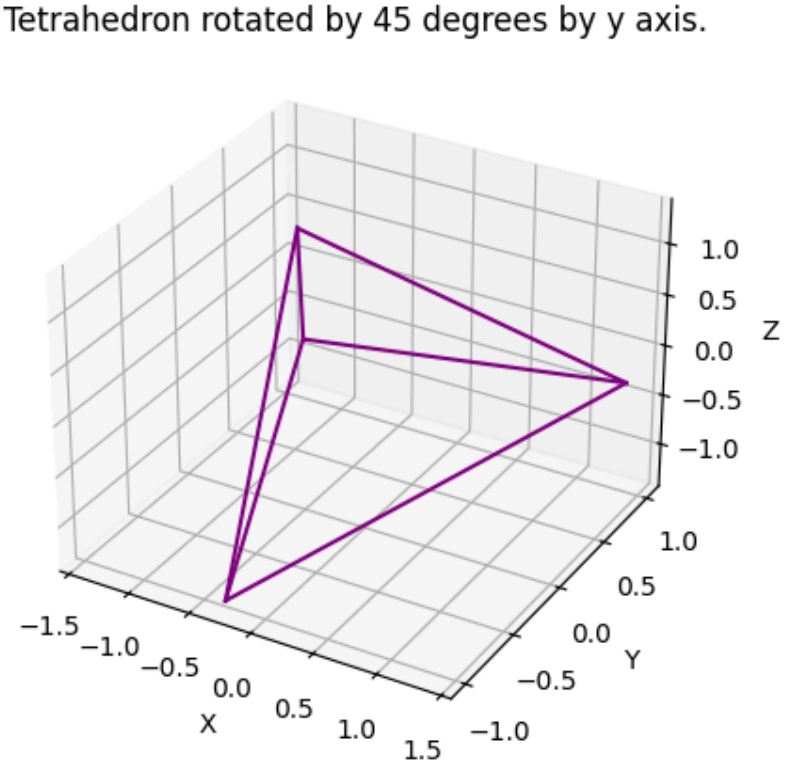
Tetrahedron without applied transformations.

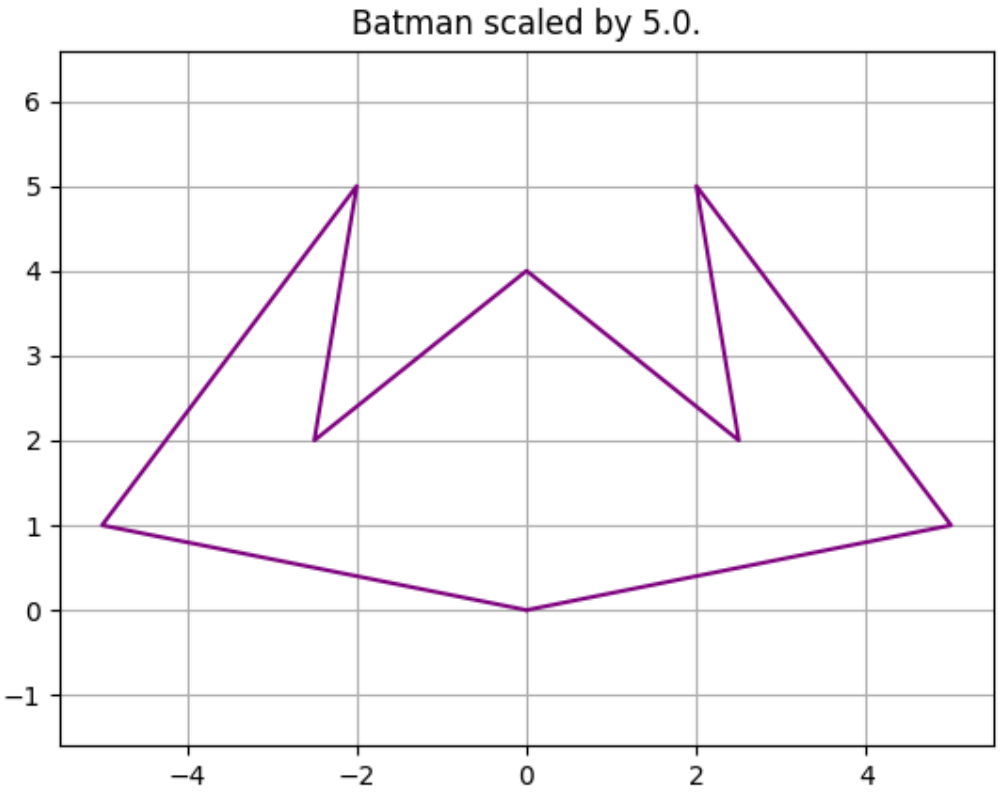


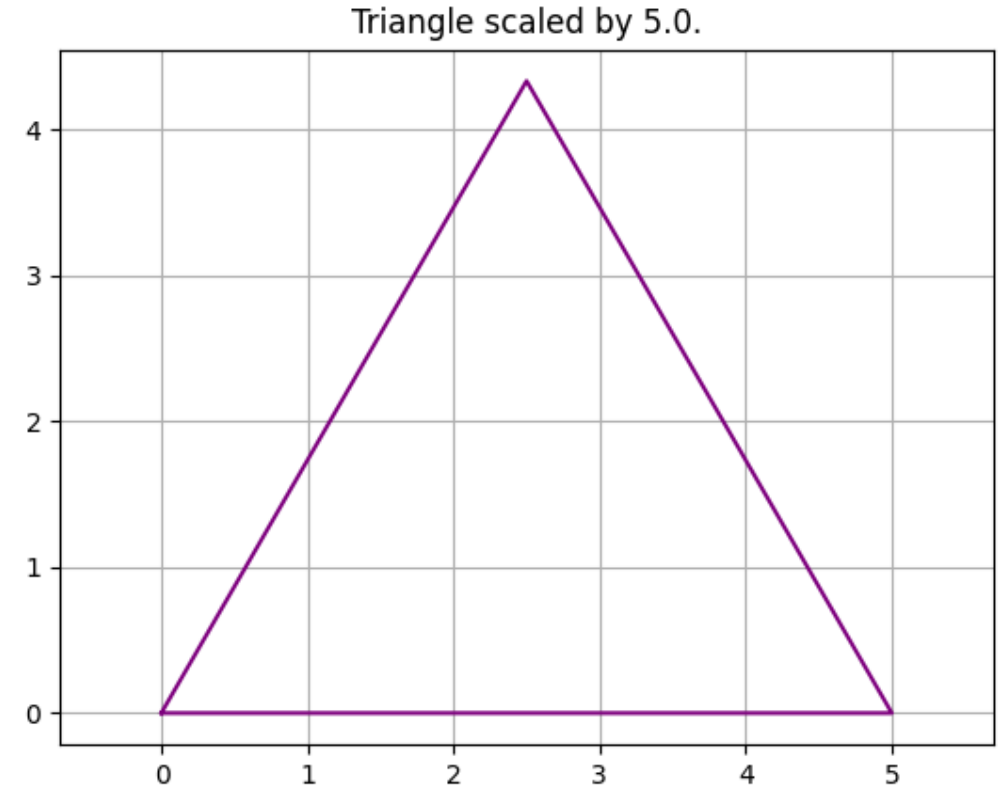
Batman rotated by 45 degrees.



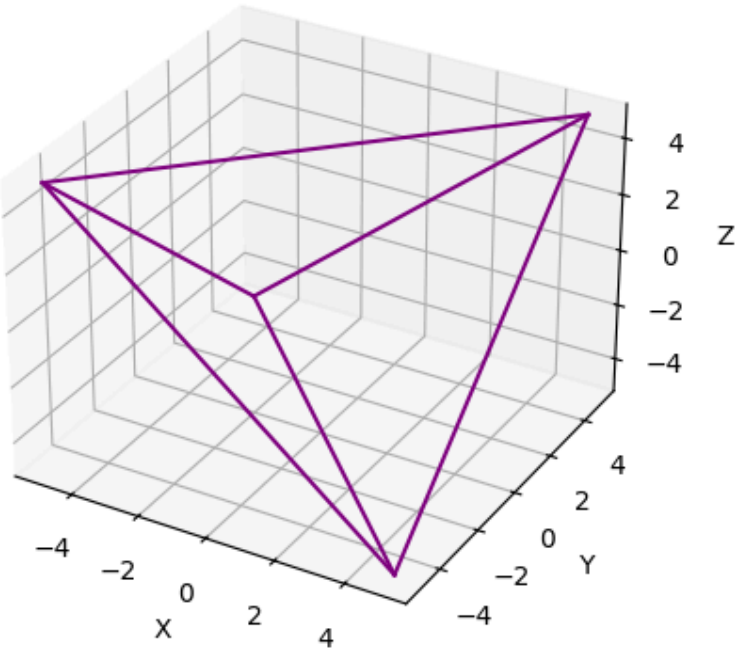

Triangle rotated by 45 degrees.
0.2
0.0
−0.2
−0.4
−0.6
−0.2
0.0
0.2
0.4
0.6
0.8
1.0


Tetrahedron rotated by 45 degrees by y axis.
1.0
0.5
0.0
−0.5
−1.0
Z
1.0
0.5
0.0
−0.5
−1.0
Y
−1.5
−1.0
−0.5
0.0
0.5
1.0
1.5
X

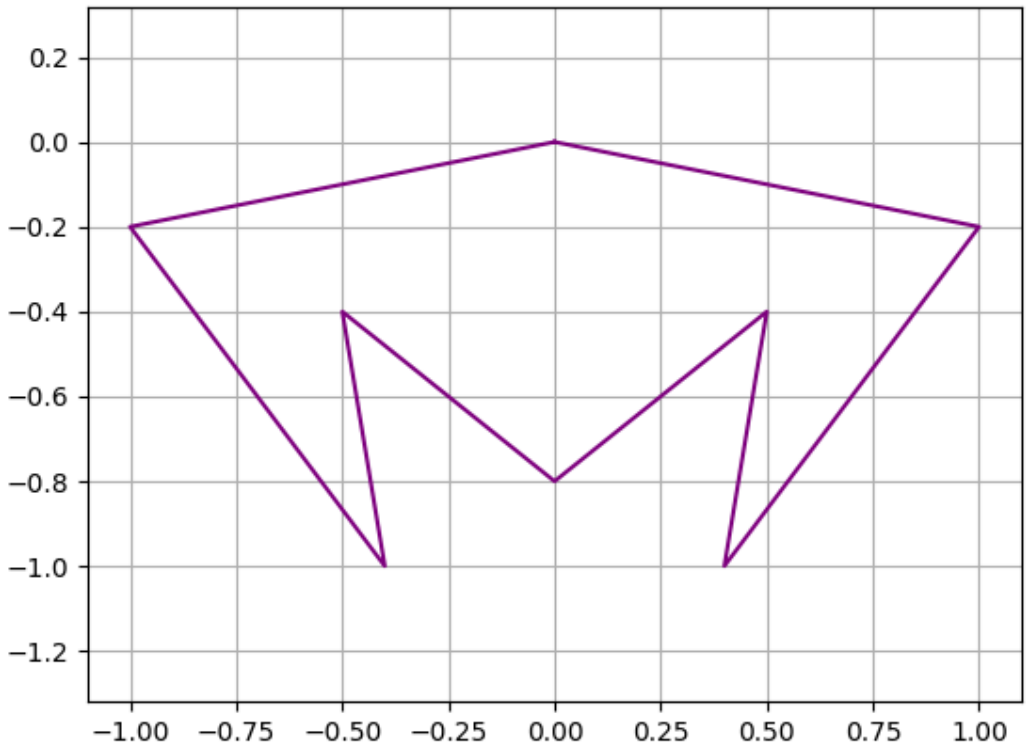

Batman scaled by 5.0.
6
5
4
3
2
1
0
−1
−4
−2
0
2
4

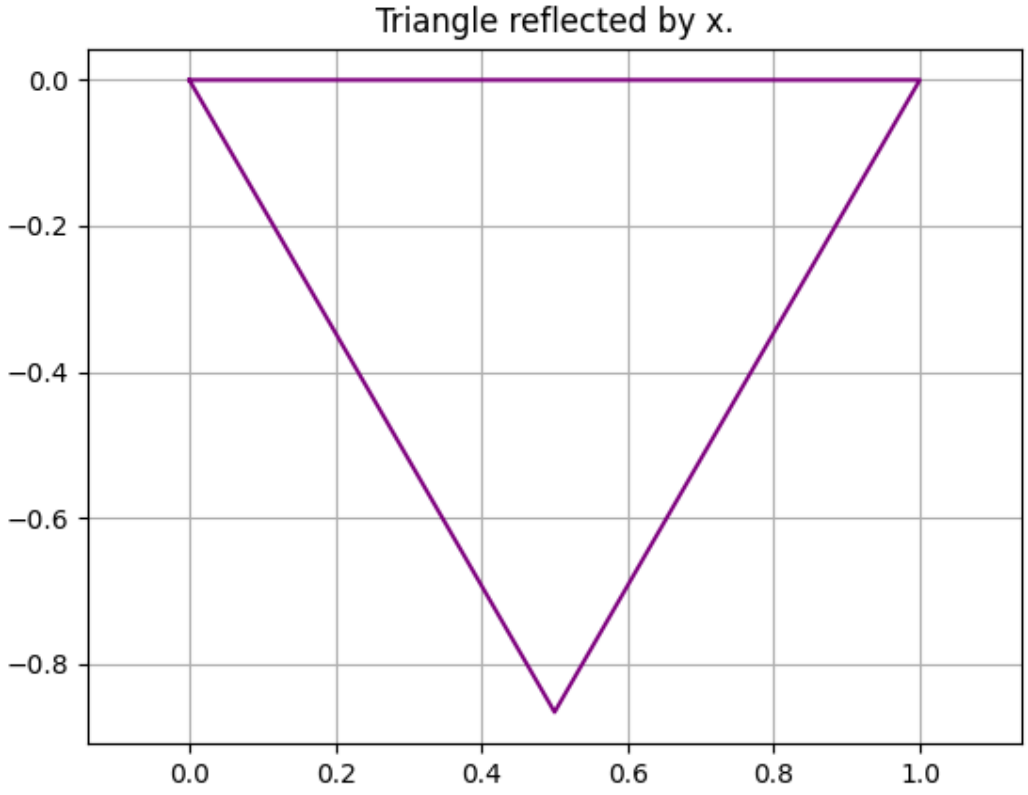

Triangle scaled by 5.0.
4
3
2
1
0
0
1
2
3
4
5

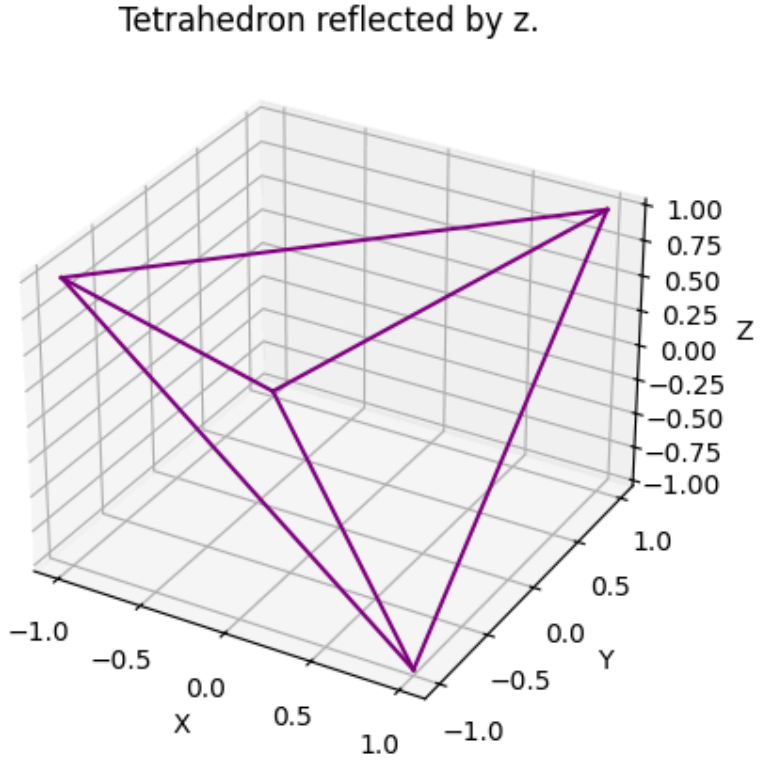
Tetrahedron scaled by 5.0.

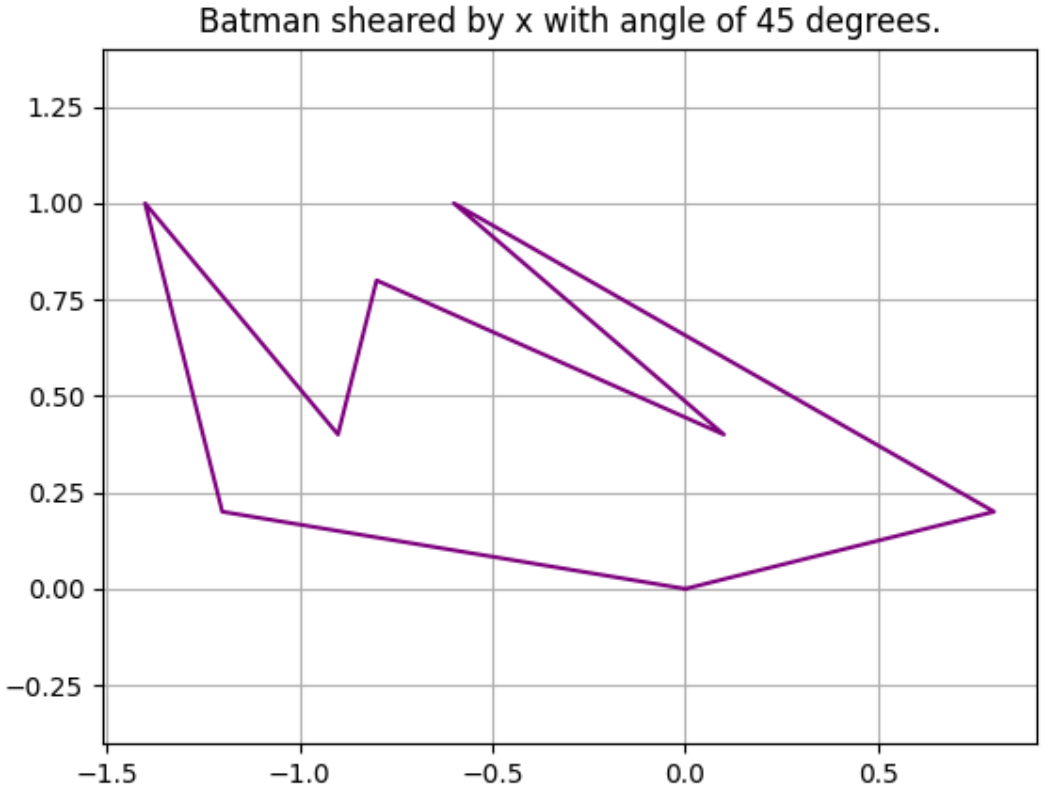


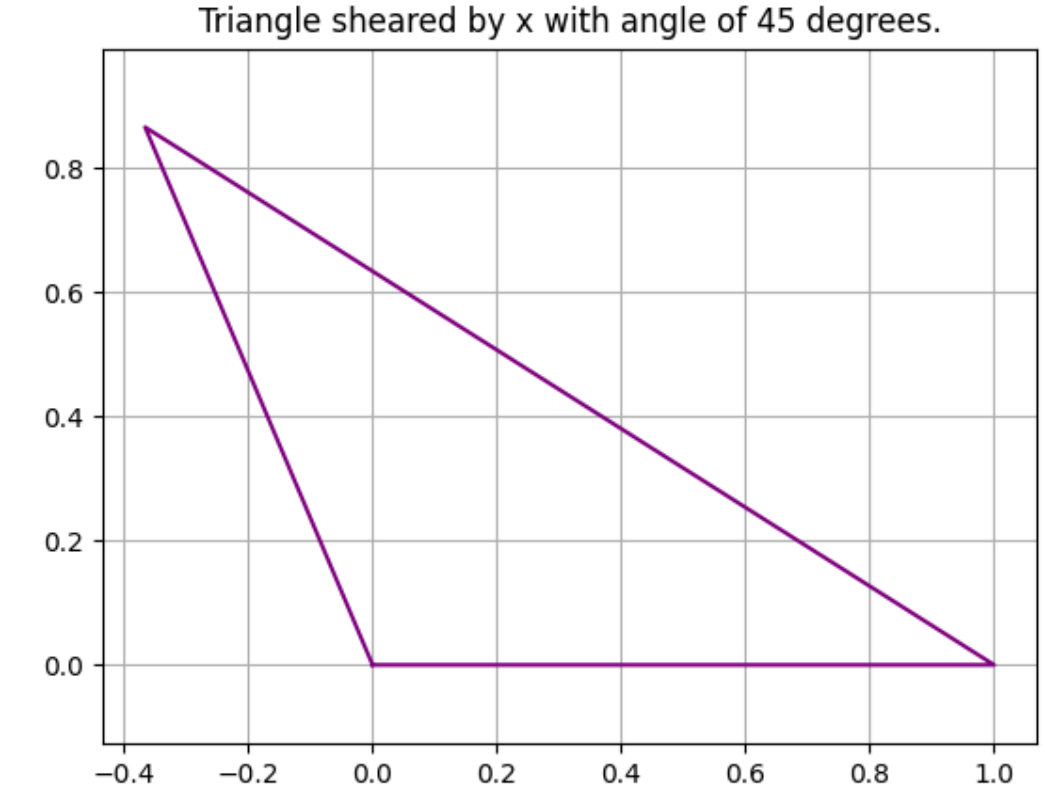
Batman reflected by x.




Triangle reflected by x.
0.0
−0.2
−0.4
−0.6
−0.8
0.0
0.2
0.4
0.6
0.8
1.0


Tetrahedron reflected by z.
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
Z
1.0
0.5
0.0
−0.5
−1.0
Y
−1.0
−0.5
0.0
0.5
1.0
X


Batman sheared by x with angle of 45 degrees.
1.25
1.00
0.75
0.50
0.25
0.00
−0.25
−1.5
−1.0
−0.5
0.0
0.5


Triangle sheared by x with angle of 45 degrees.
0.8
0.6
0.4
0.2
0.0
−0.4
−0.2
0.0
0.2
0.4
0.6
0.8
1.0

```
Enter numbers for a, b, c and d in order 'a' 'b' 'c' 'd' respectfully for 2x2 matrix for 2d objects:
a b
c d
1 2 3 4
```