Lab 1: Linear transformations

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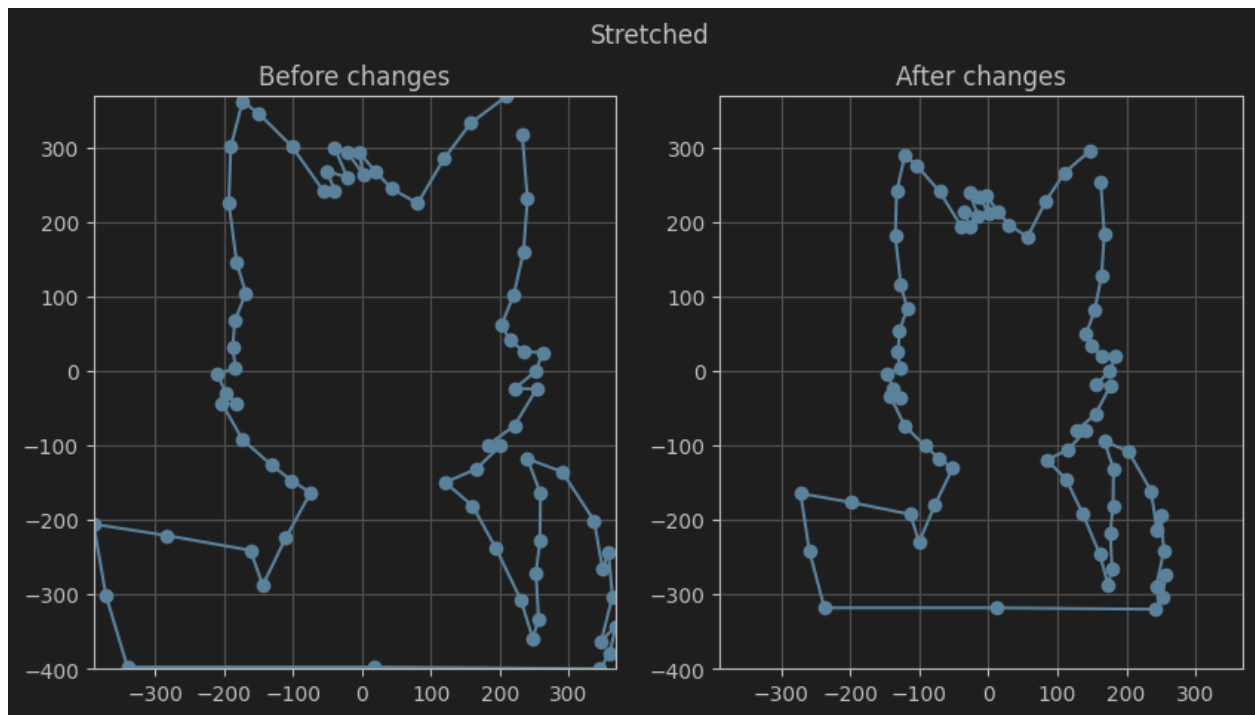
MATH252 Group 2
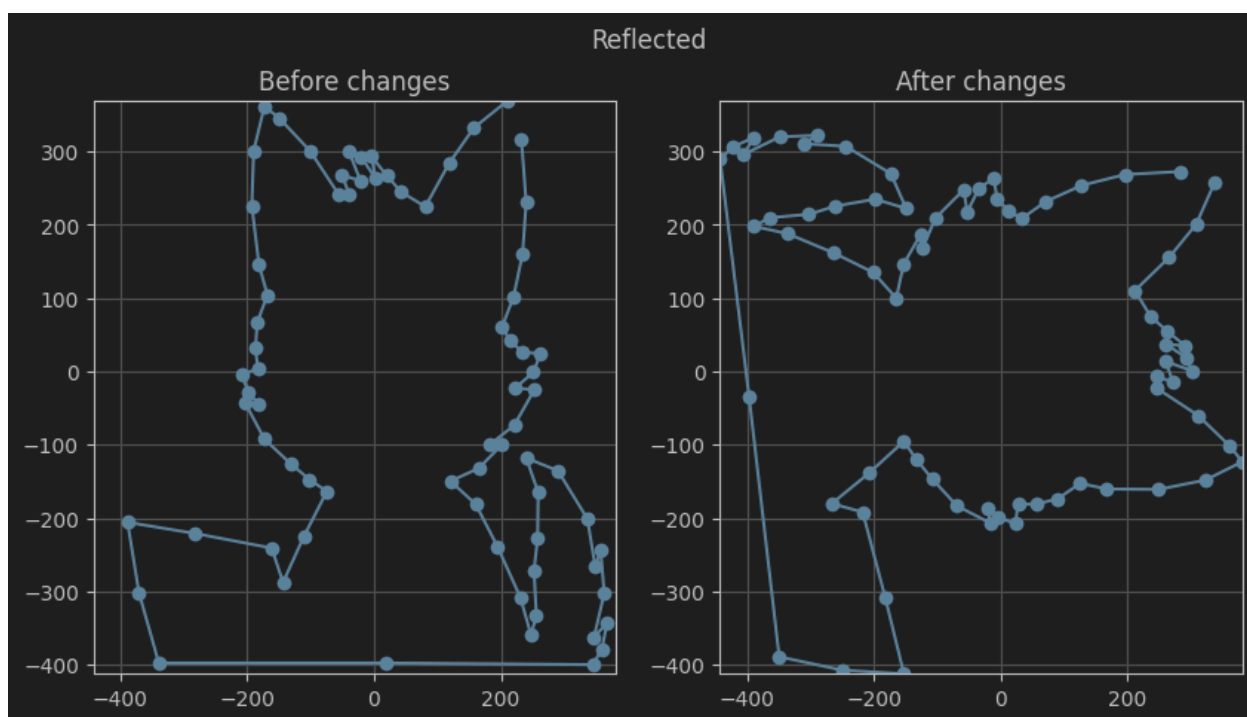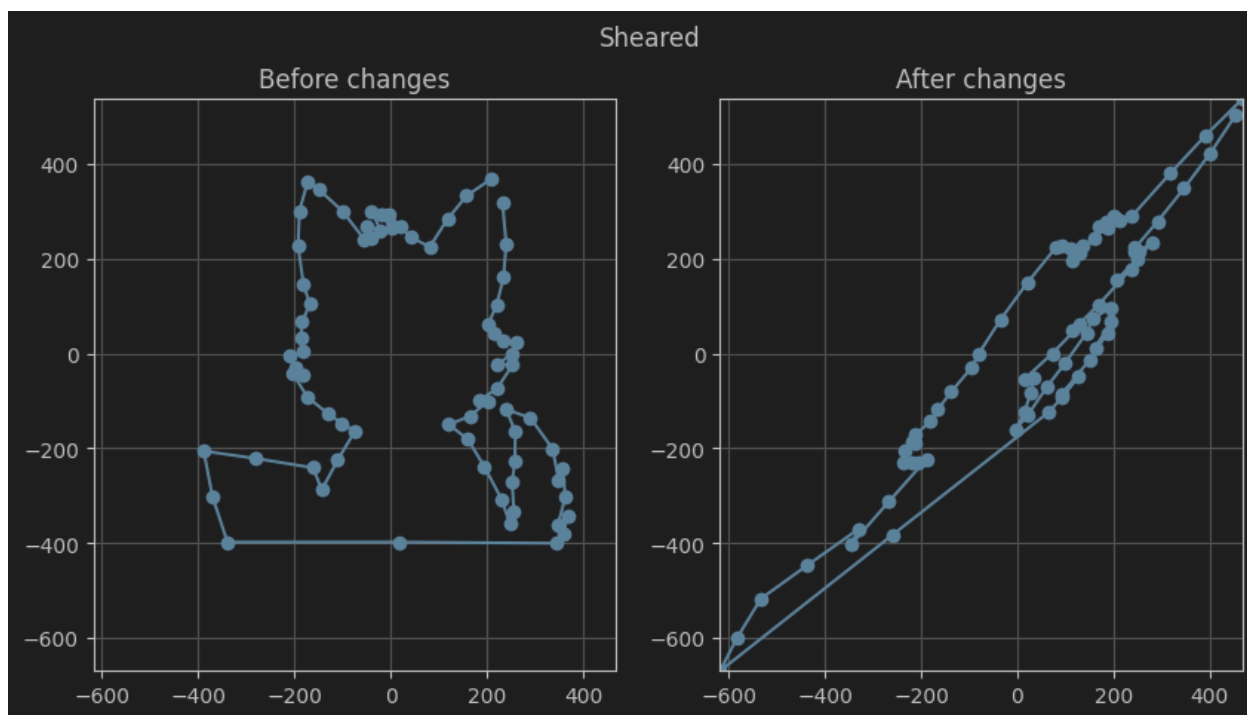
Link on repo: https://github.com/nvytska/lab1-linear-transformations
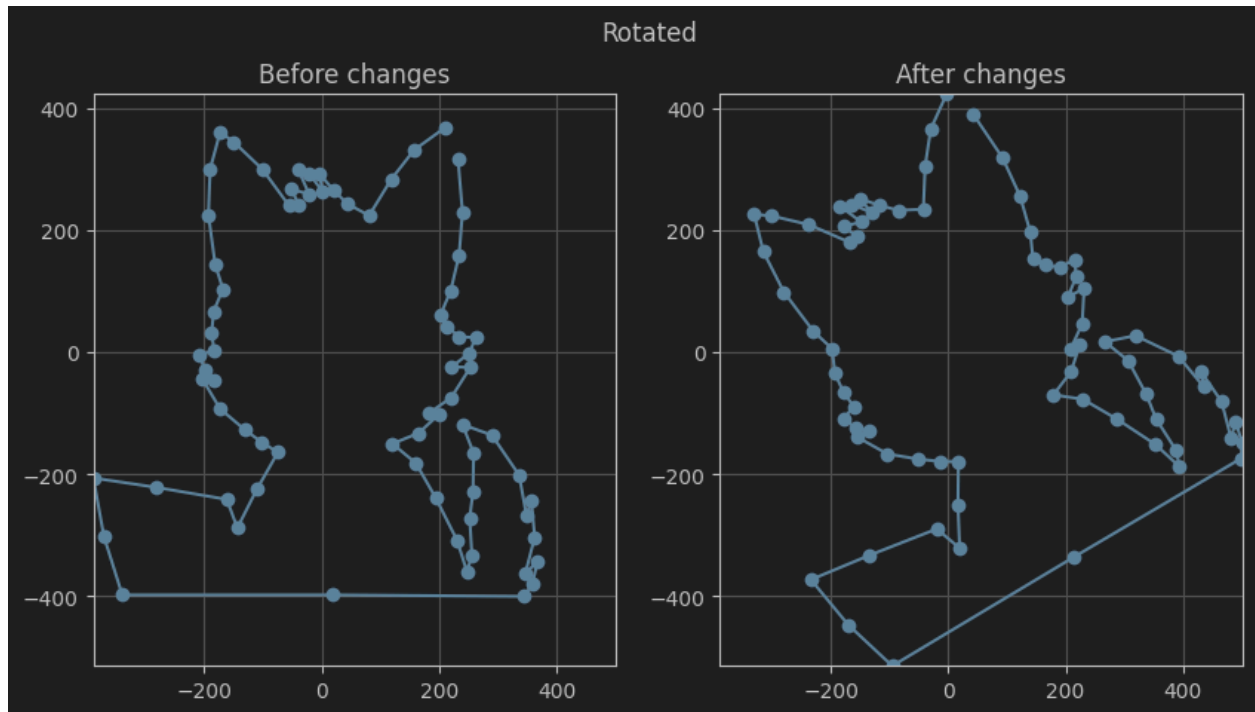**There you will find code in files and answers on theoretical questions.**

Results of tasks:

Task 1.

Applied transformations on lynx

Sheared

Before changes

After changes

Reflected

Before changes

After changes

Rotated

Before changes

After changes

Task 2.

Stretch - shear - rotate

Before changes

After changes

Shear - stretch - rotate

Before changes · After changes
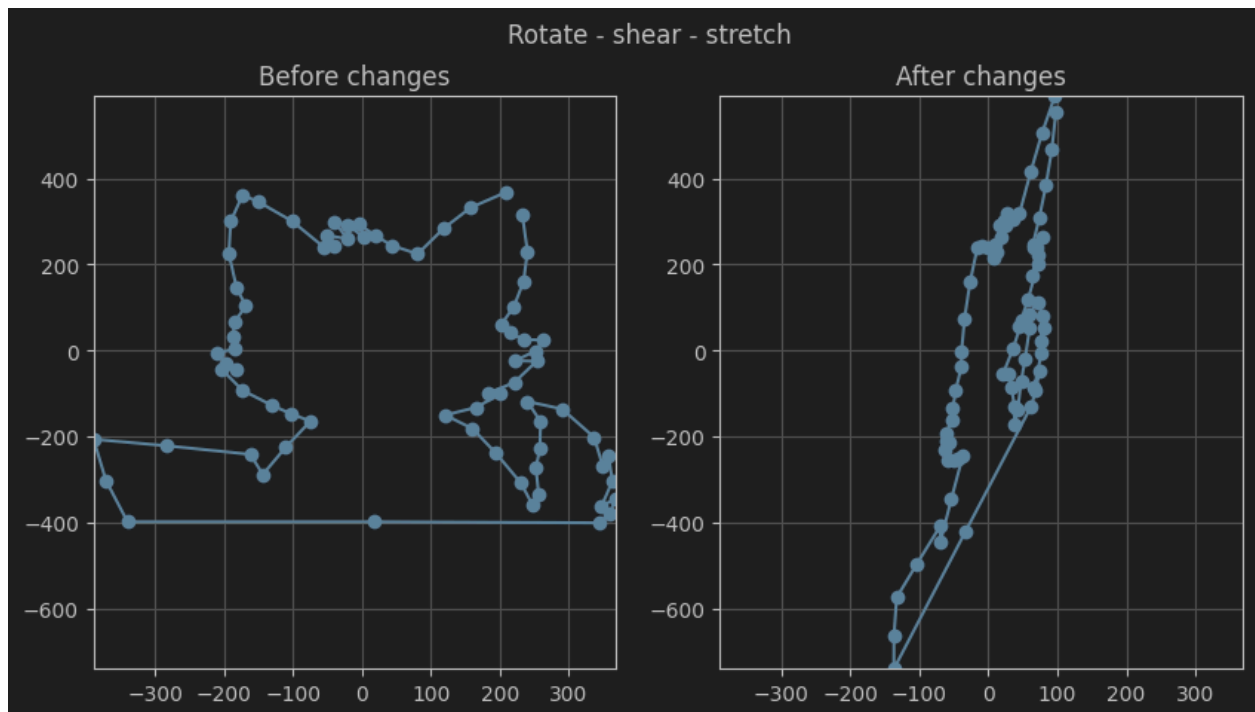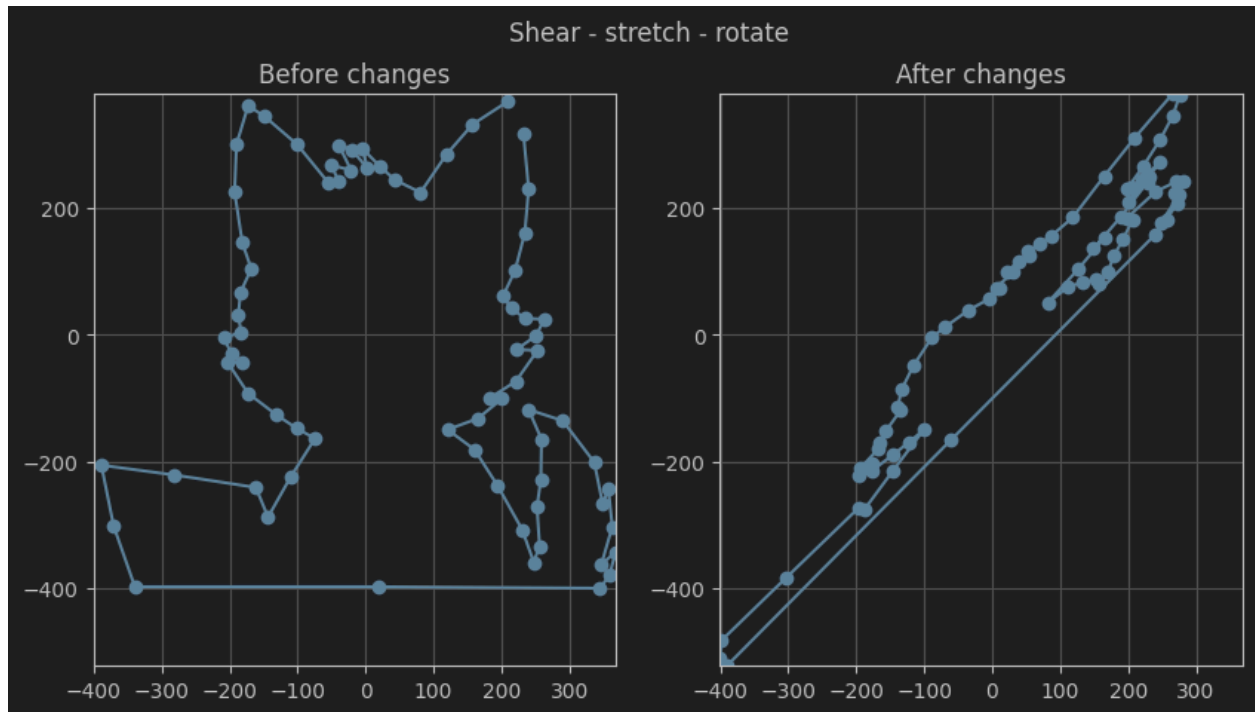
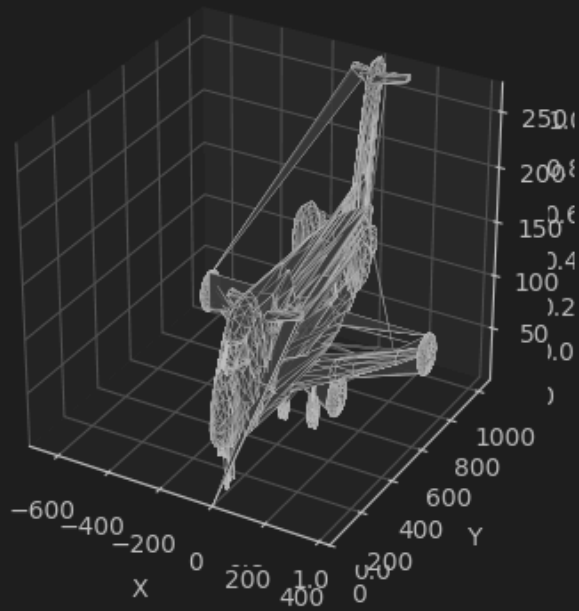Rotate - shear - stretch

Before changes · After changes

All results are different because matrix multiplication is not commutative, changing the order of transformations changes the final result.

Task 3.
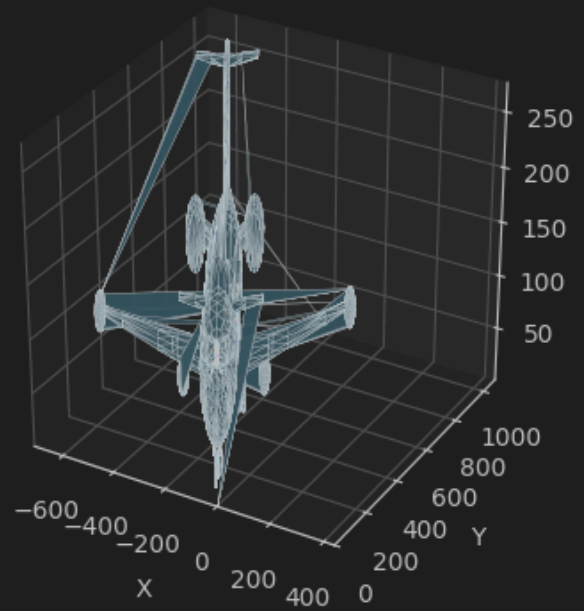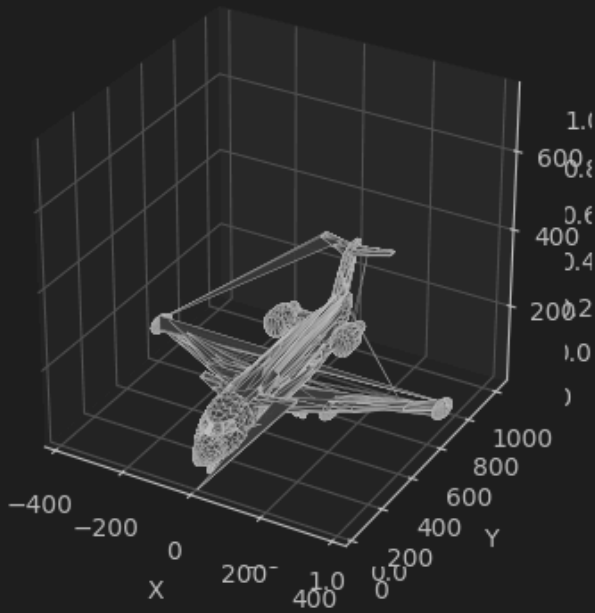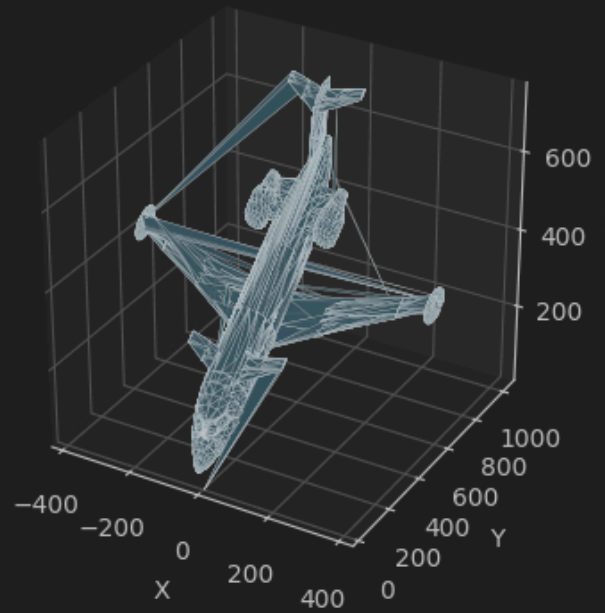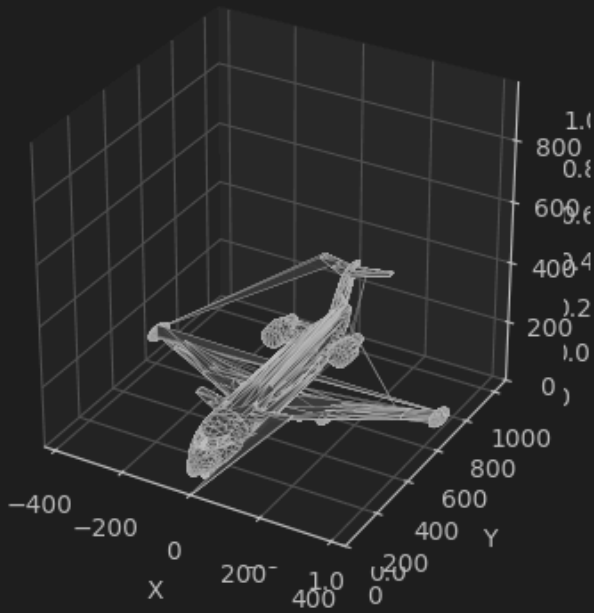
Rotated XY

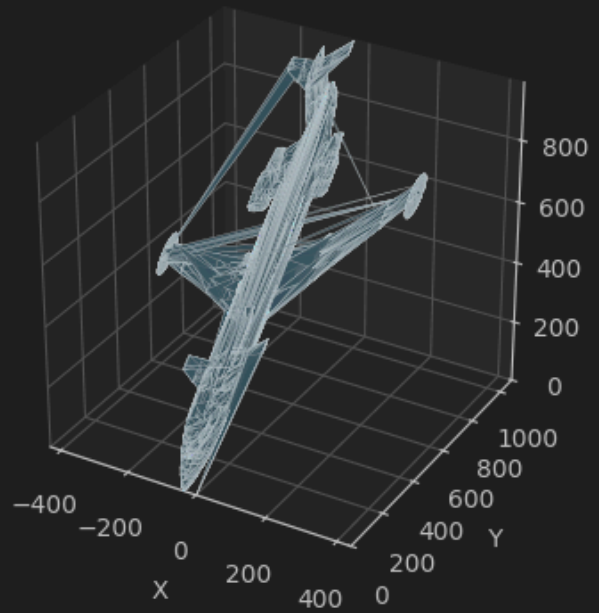## Before changes

After changes

Rotated YZ

Before changes

After changes

Task 4.

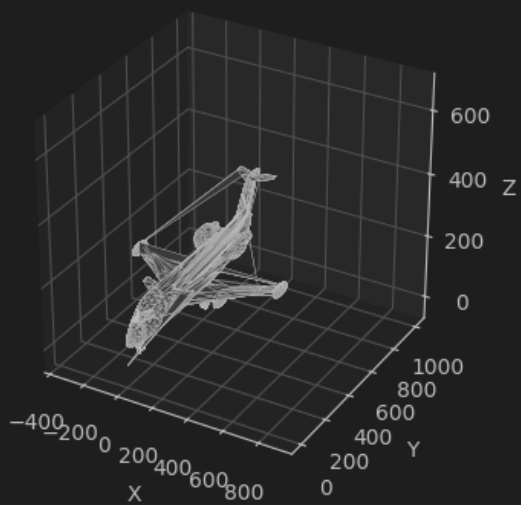# Task 4: Combined rotation

Before changes

After changes