

# Drawing Study

Please rate your drawing ability on a scale from 1 (no ability) to 10 (drawing expert)

1      2      3      4      5      6      7      8      9      10

Please briefly describe your ( drawing / art / design / architecture ) experience:

This study has 3 Parts. In each Part, you will draw curves on 3D surfaces. In Part 1, the surfaces are simple cylinders and planes. In Parts 2 and 3, you will draw curves on the free-form surface displayed on the sheet labeled **Surface Page A**, which the experimenter has provided. Please complete the drawing as per the instructions on the first page of each booklet. Proceed through the pages in order, and please do not go back and make changes to pages you have finished.

On each page, you will be asked to draw a single 2D curve. Feel free to over-sketch your curves as many times as you like, until you are satisfied. **But once you are finished, please trace over your final curve with a dark stroke.**

Thank you for your participation.

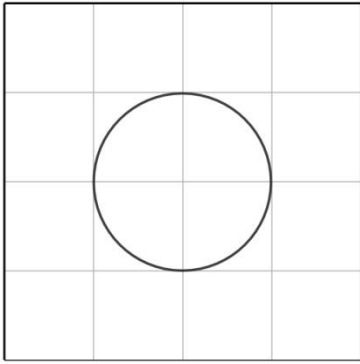
(name withheld for anonymous submission)

## Part 1 – Drawing 3D Curves

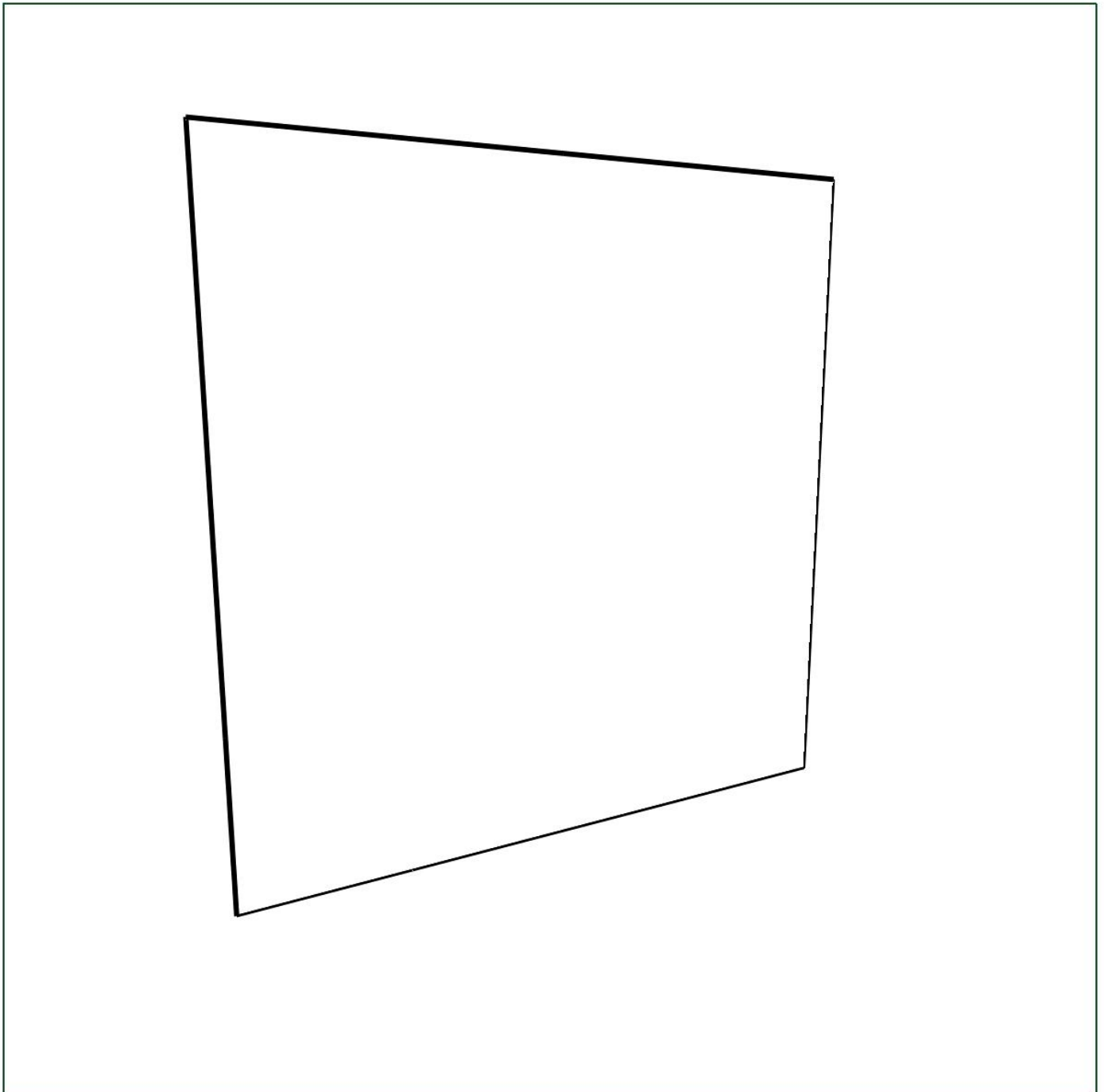
Each of the following pages contains a contour drawing of a 3D surface from a perspective viewpoint. The surface is described at the top of the page. A curve which lies on the surface is also described, and shown from one or more parallel-projection viewpoints.

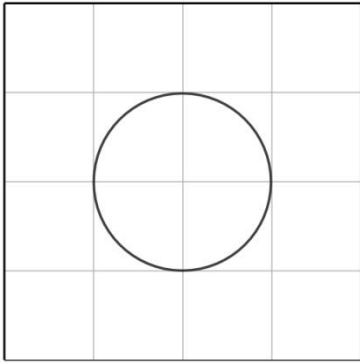
Your task is to draw the described curve, as accurately as possible. You may over-sketch your curves as many times as you like, until you are satisfied. **But once you are finished, please trace over your final curve with a dark stroke.**

If you have any questions, please ask the experimenter.

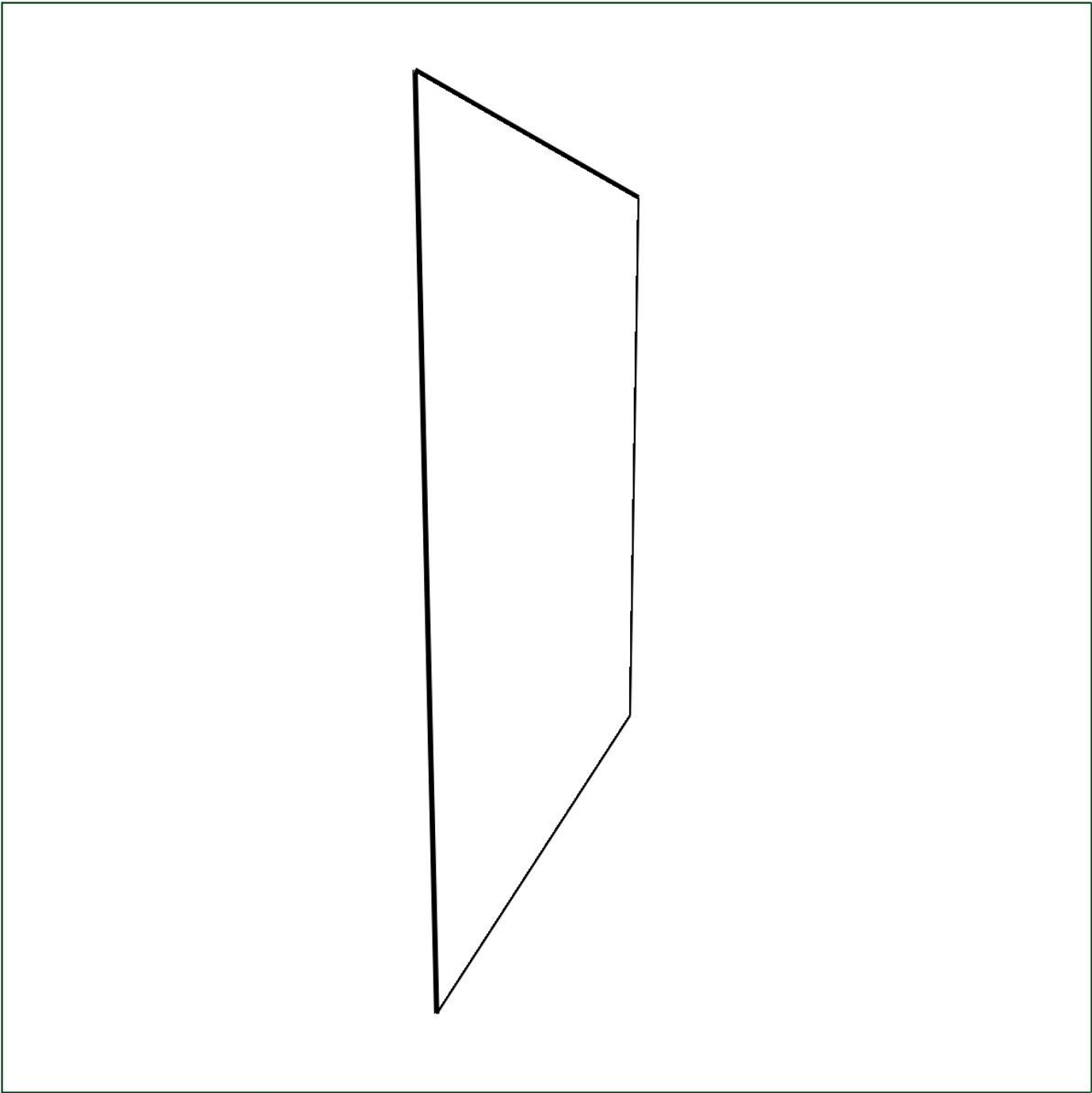


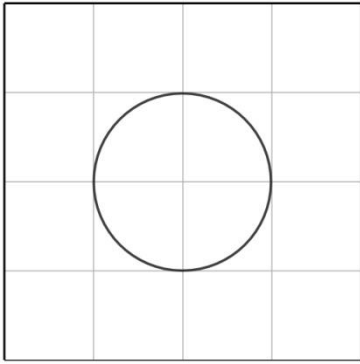
The shape below is a square drawn from a perspective viewpoint. The square is 4 units wide and 4 units high. Please draw a circle which is 2 units wide by 2 units high, and is centered in the middle of the square, as shown in the image to the left.



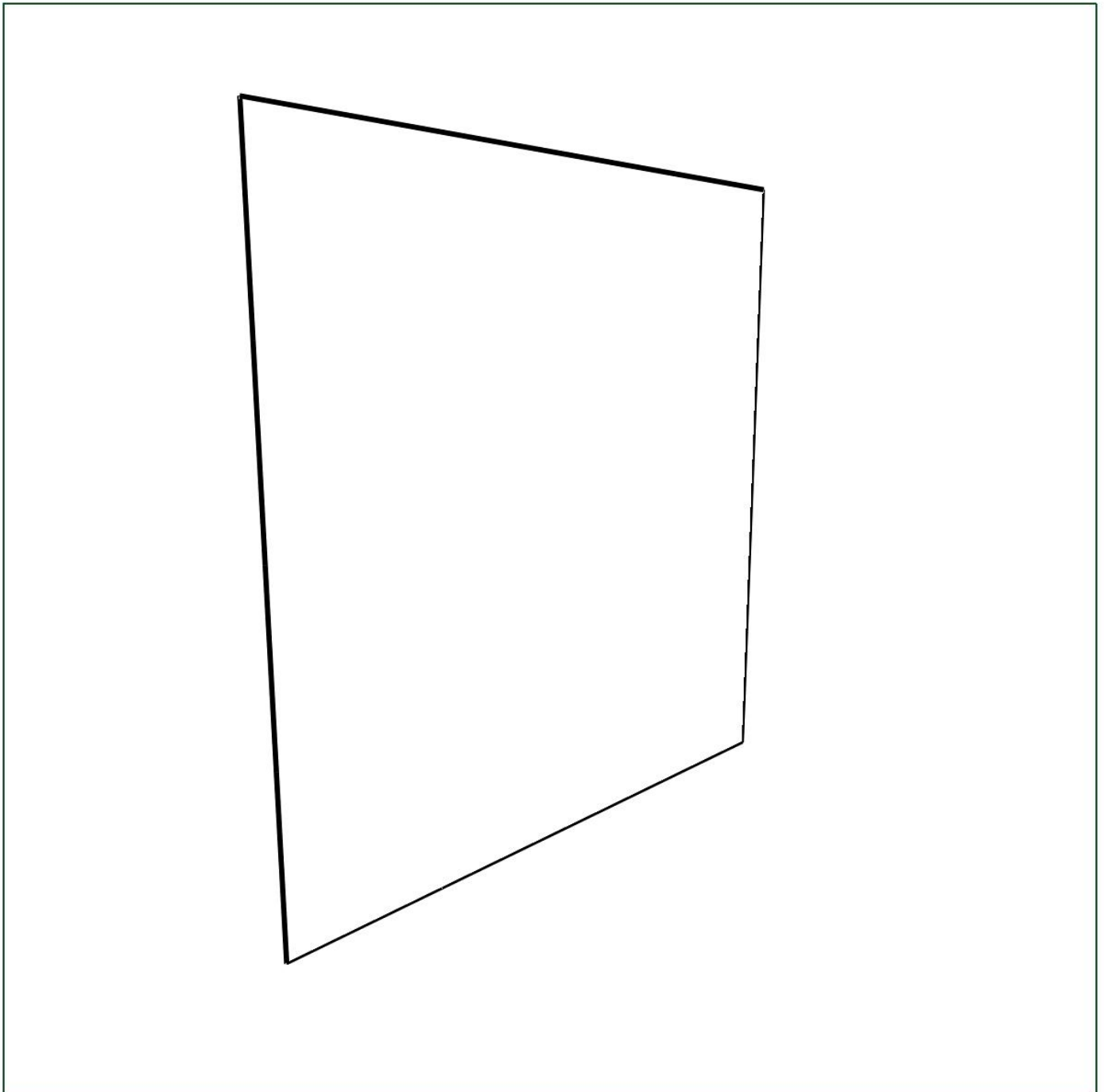


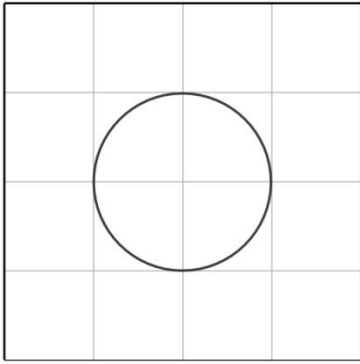
The shape below is a square drawn from a perspective viewpoint. The square is 4 units wide and 4 units high. Please draw a circle which is 2 units wide by 2 units high, and is centered in the middle of the square, as shown in the image to the left.



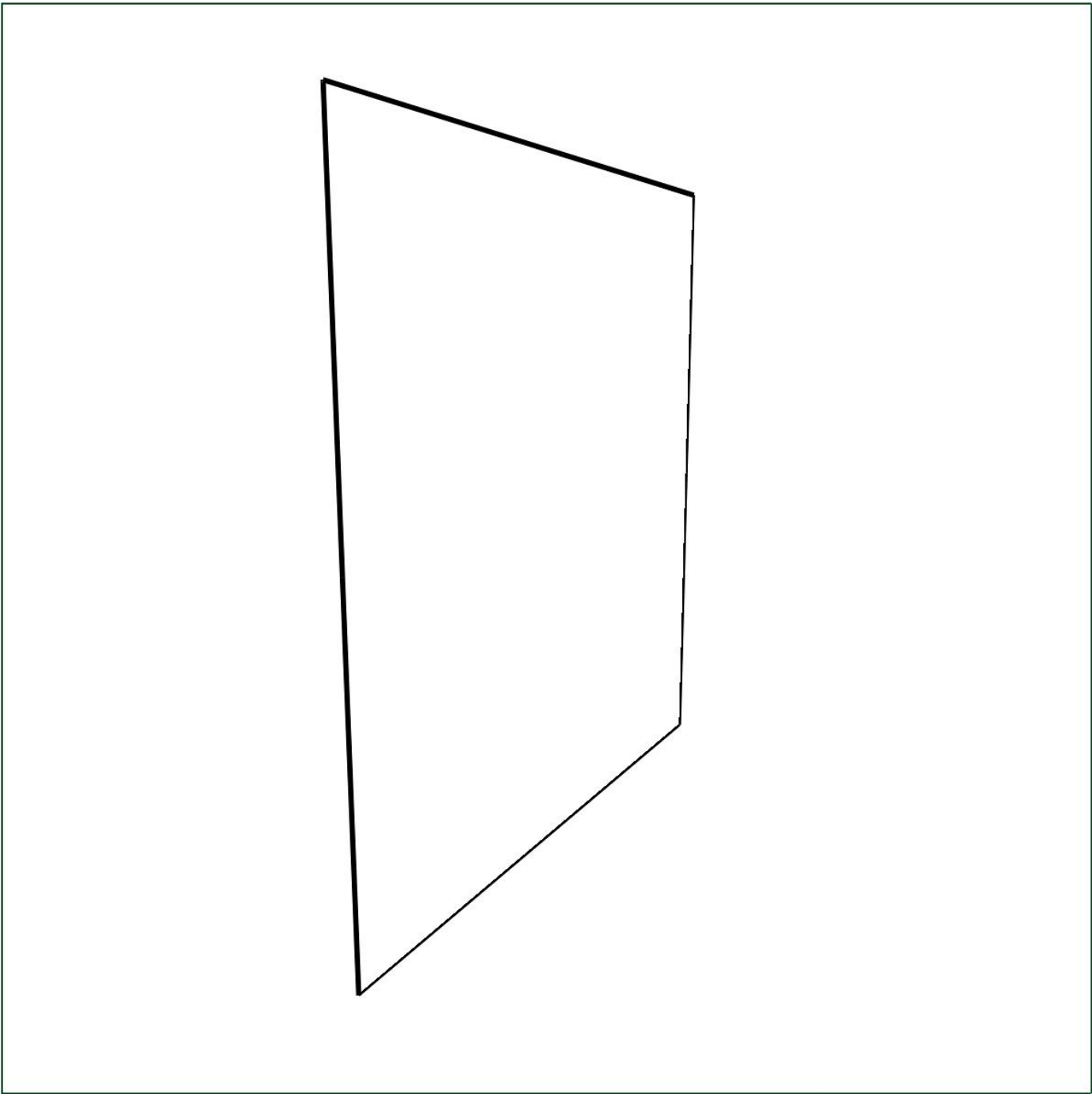


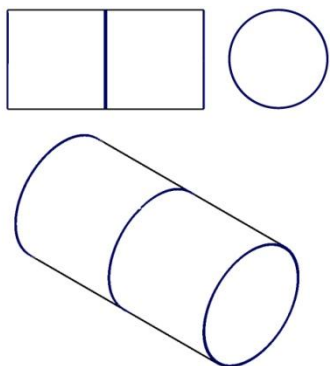
The shape below is a square drawn from a perspective viewpoint. The square is 4 units wide and 4 units high. Please draw a circle which is 2 units wide by 2 units high, and is centered in the middle of the square, as shown in the image to the left.



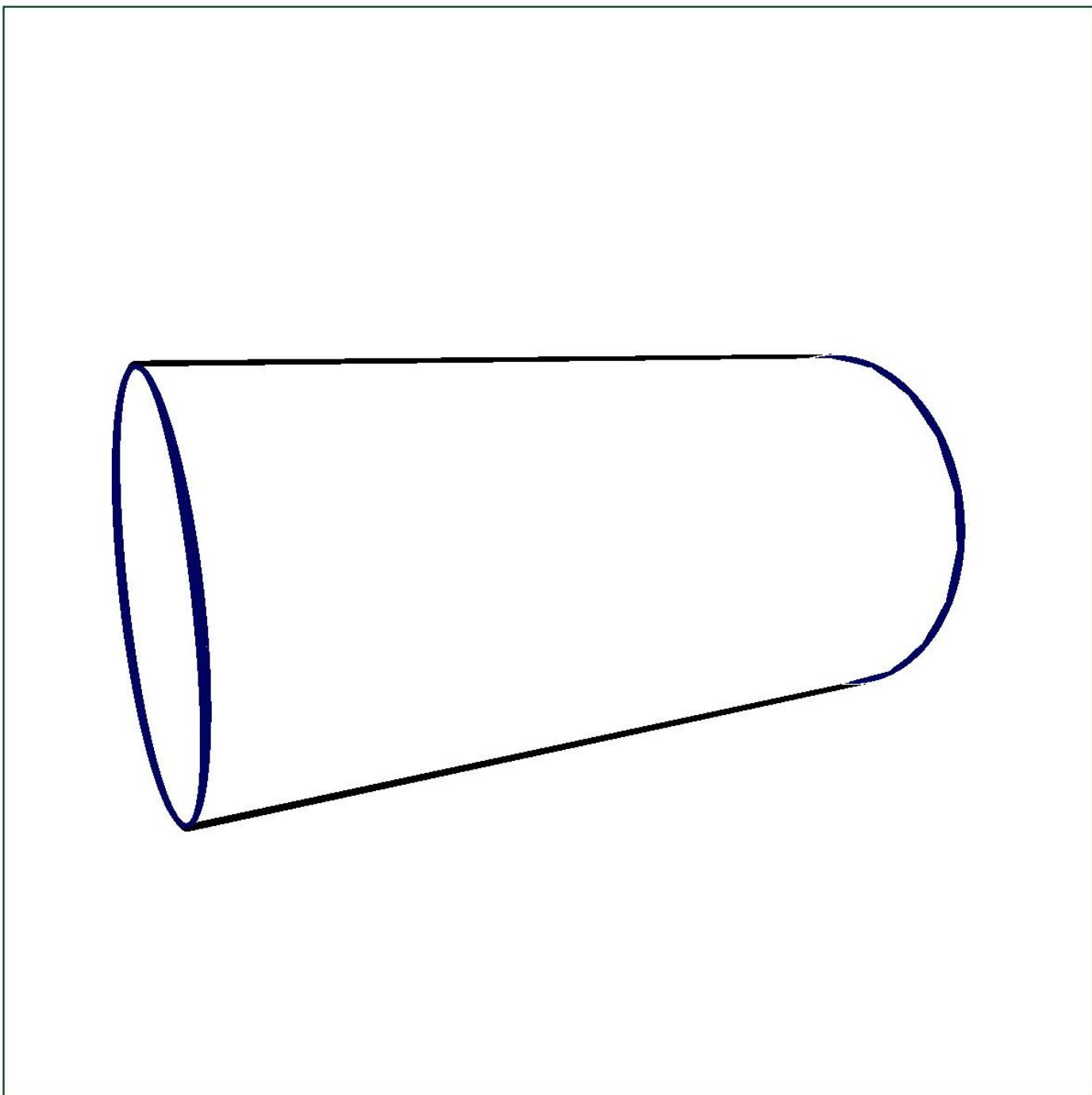


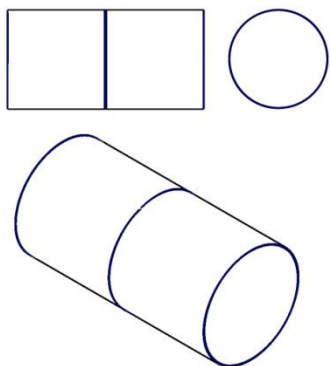
The shape below is a square drawn from a perspective viewpoint. The square is 4 units wide and 4 units high. Please draw a circle which is 2 units wide by 2 units high, and is centered in the middle of the square, as shown in the image to the left.



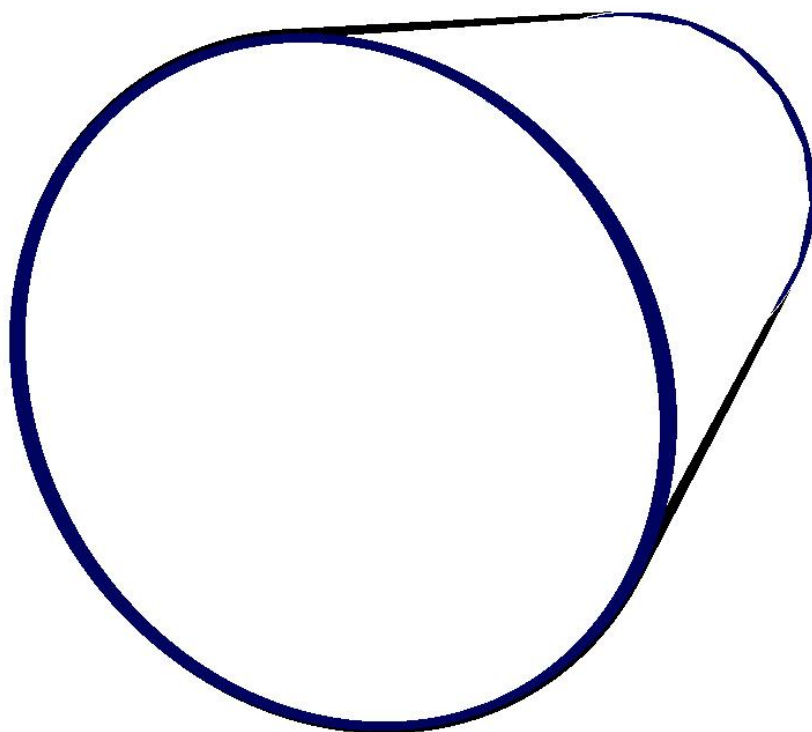


The shape below is a cylinder drawn from a perspective viewpoint. The cylinder is 1 unit wide by 1 unit high by 2 units long. Please draw the visible portion of the circle which lies half-way along the length of the cylinder (1 unit from each end), as shown in the image to the left.

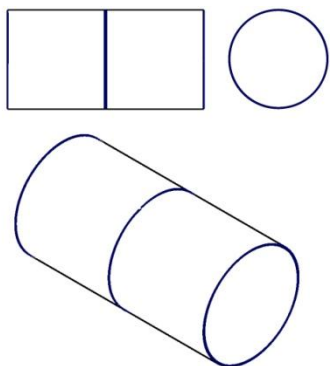




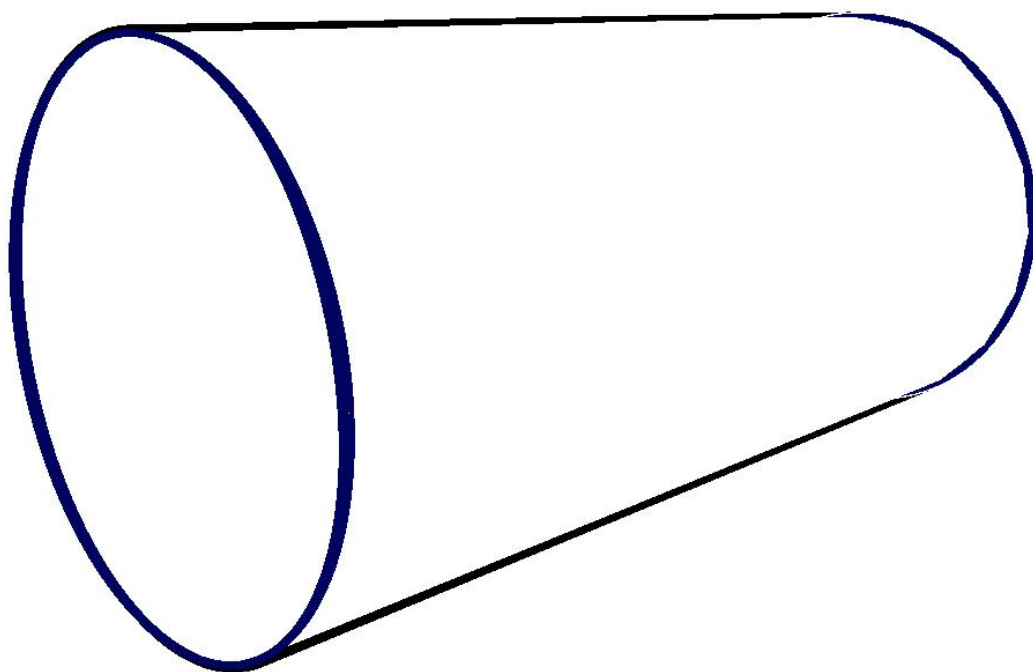
The shape below is a cylinder drawn from a perspective viewpoint. The cylinder is 1 unit wide by 1 unit high by 2 units long. Please draw the visible portion of the circle which lies half-way along the length of the cylinder (1 unit from each end), as shown in the image to the left.

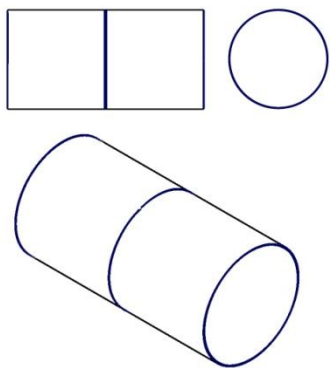




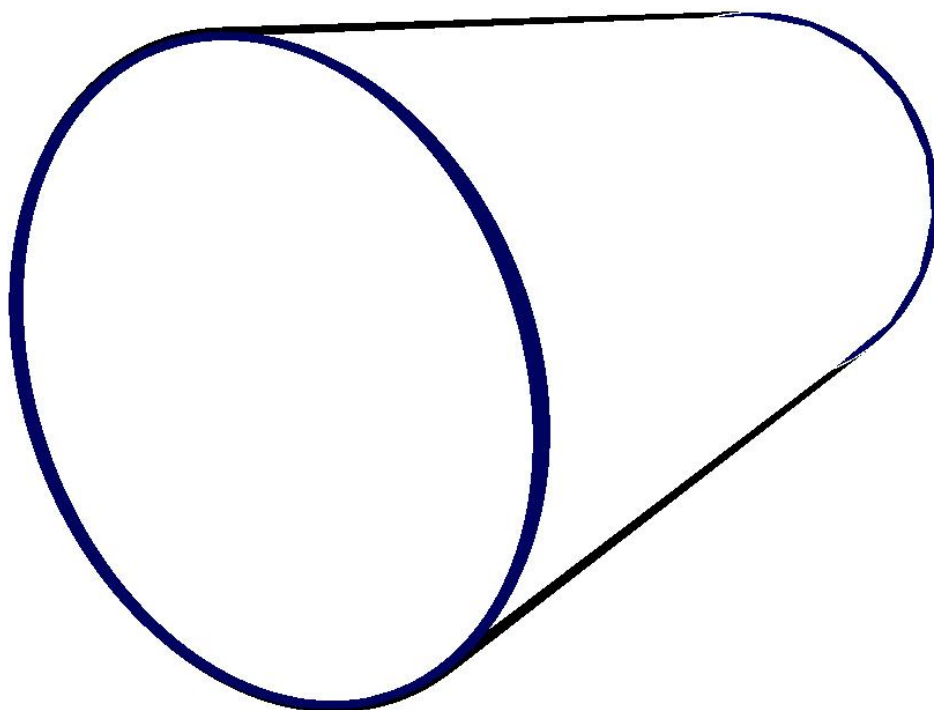


The shape below is a cylinder drawn from a perspective viewpoint. The cylinder is 1 unit wide by 1 unit high by 2 units long. Please draw the visible portion of the circle which lies half-way along the length of the cylinder (1 unit from each end), as shown in the image to the left.





The shape below is a cylinder drawn from a perspective viewpoint. The cylinder is 1 unit wide by 1 unit high by 2 units long. Please draw the visible portion of the circle which lies half-way along the length of the cylinder (1 unit from each end), as shown in the image to the left.



## Part 2 – Drawing Symmetric Curves

Each of the following pages contains a contour drawing of the 3D surface shown on **Surface Page A**, rendered from a perspective viewpoint. A portion of the silhouette is missing from the left side of each image.

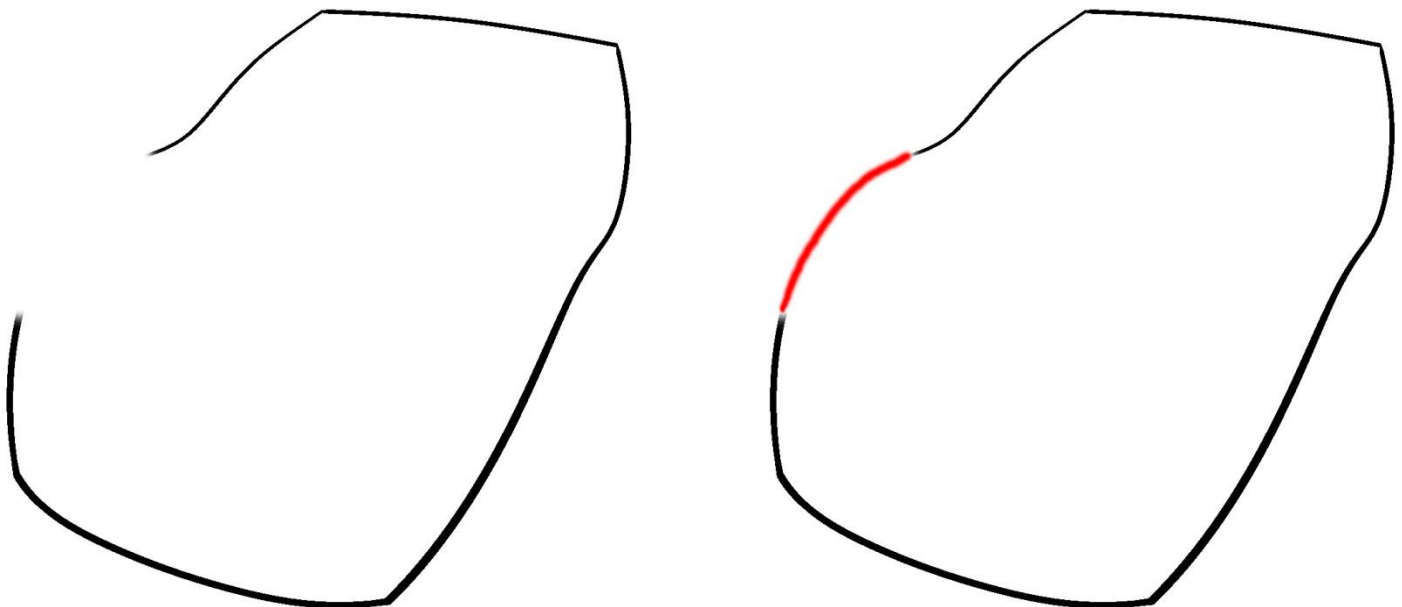
Note that, as shown on **Surface Page A**, the left and right sides of the surface are **completely symmetric**.

Please complete the silhouette curves, as accurately as possible. You may over-sketch your curves as many times as you like, until you are satisfied. **But once you are finished, please trace over your final curve with a dark stroke.**

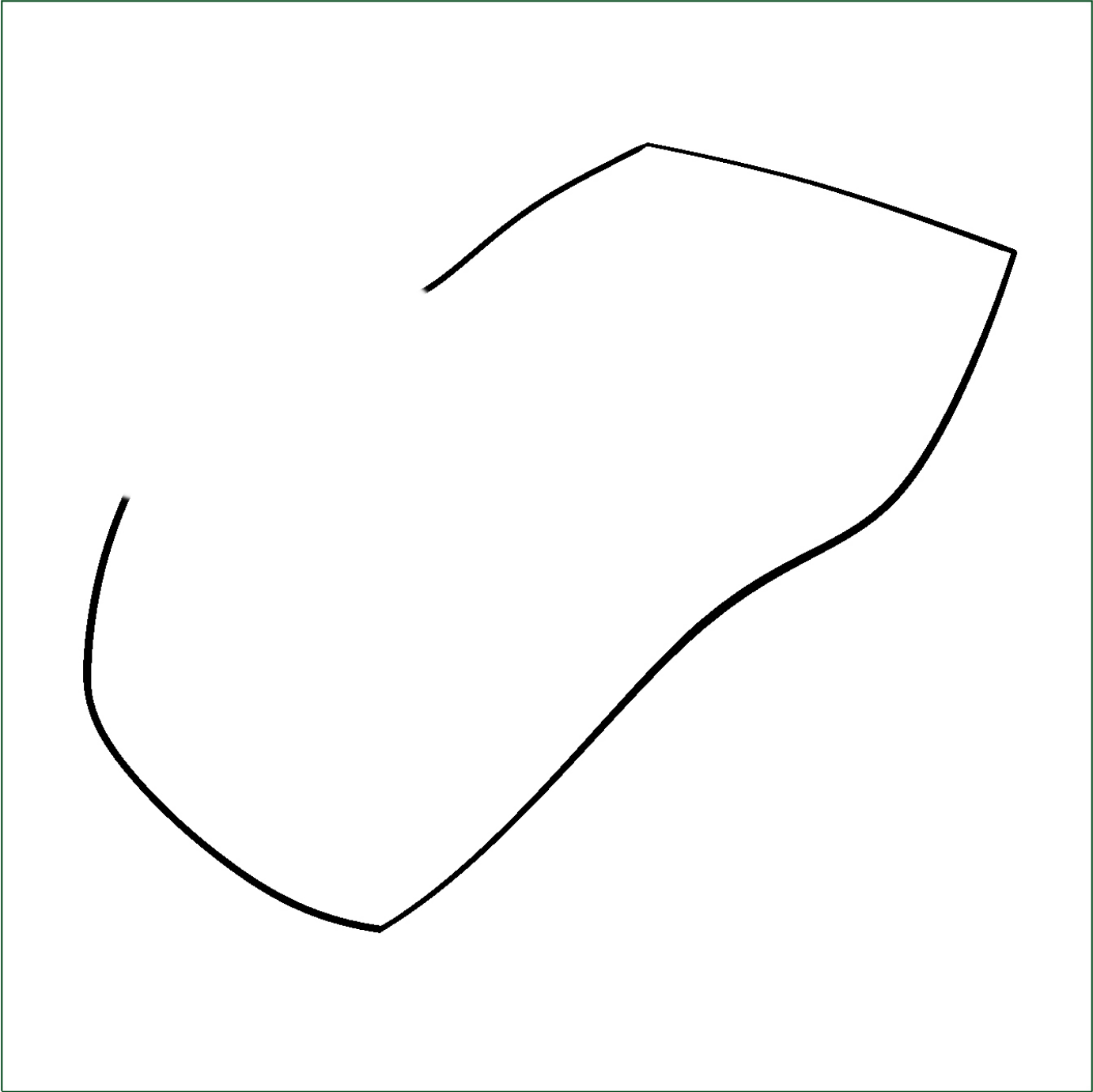
An example is shown below. If you have any questions, please ask the experimenter.

### Example:

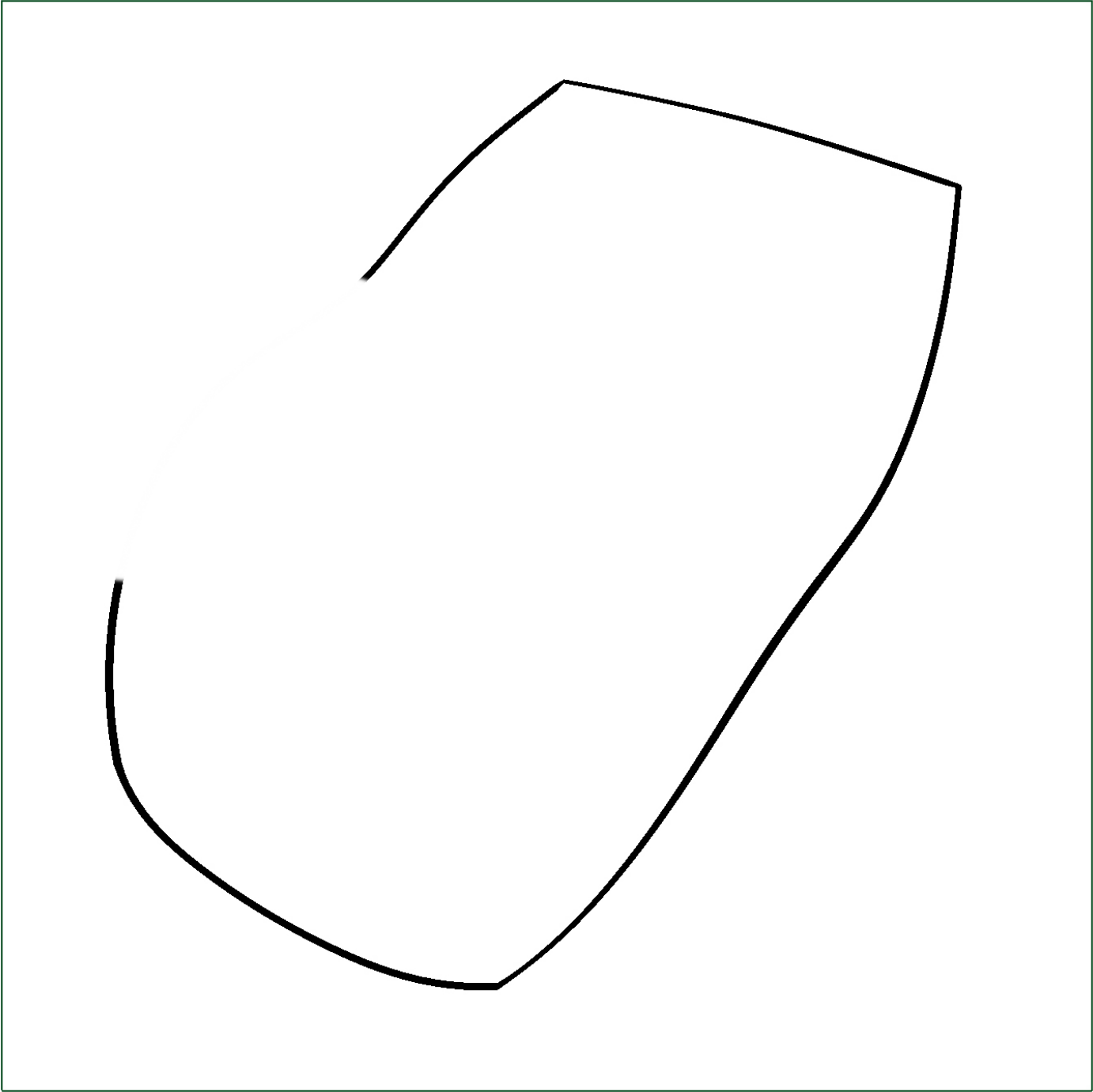
Please fill in the missing curve section



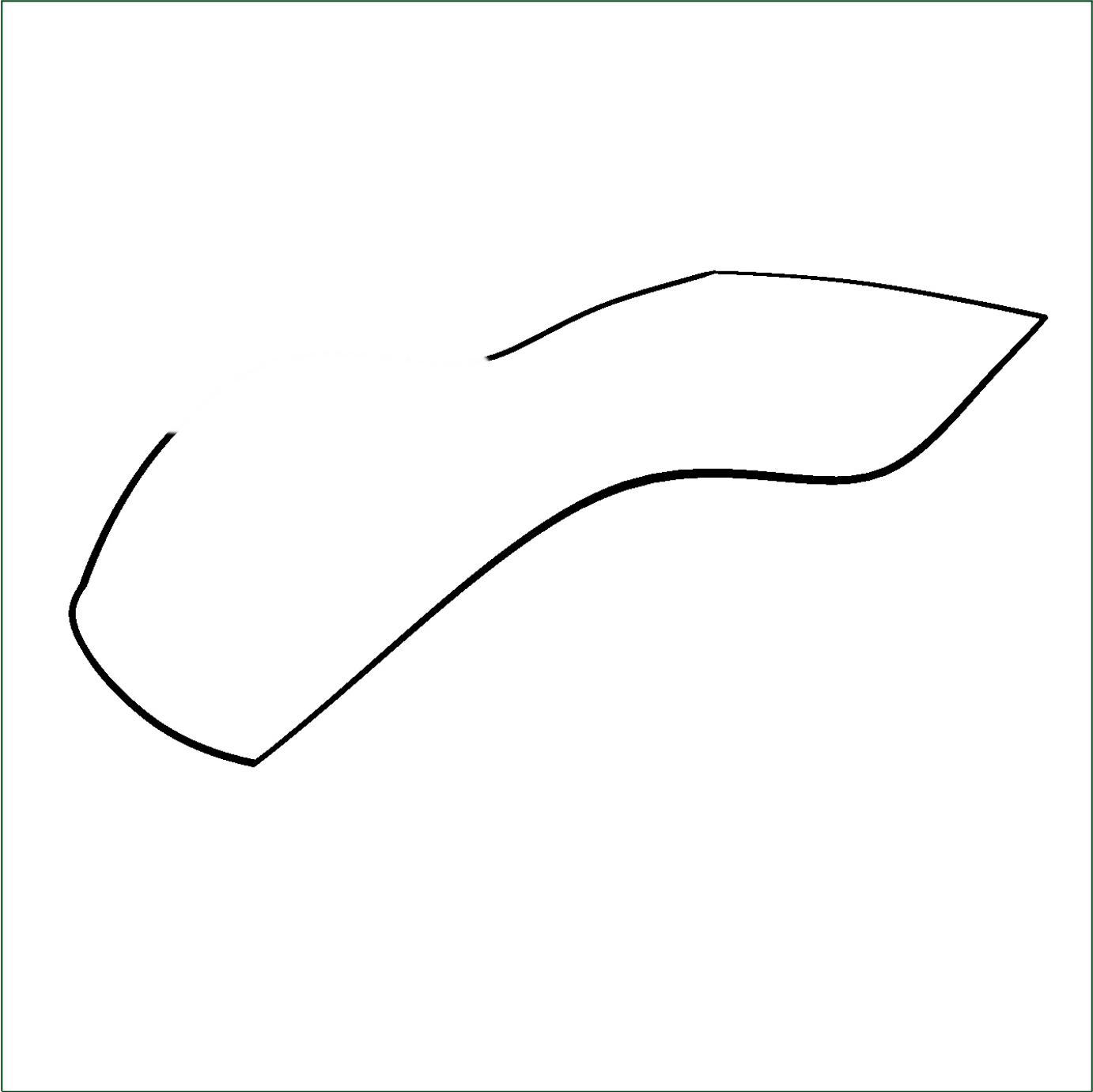
Please fill in the missing curve section.



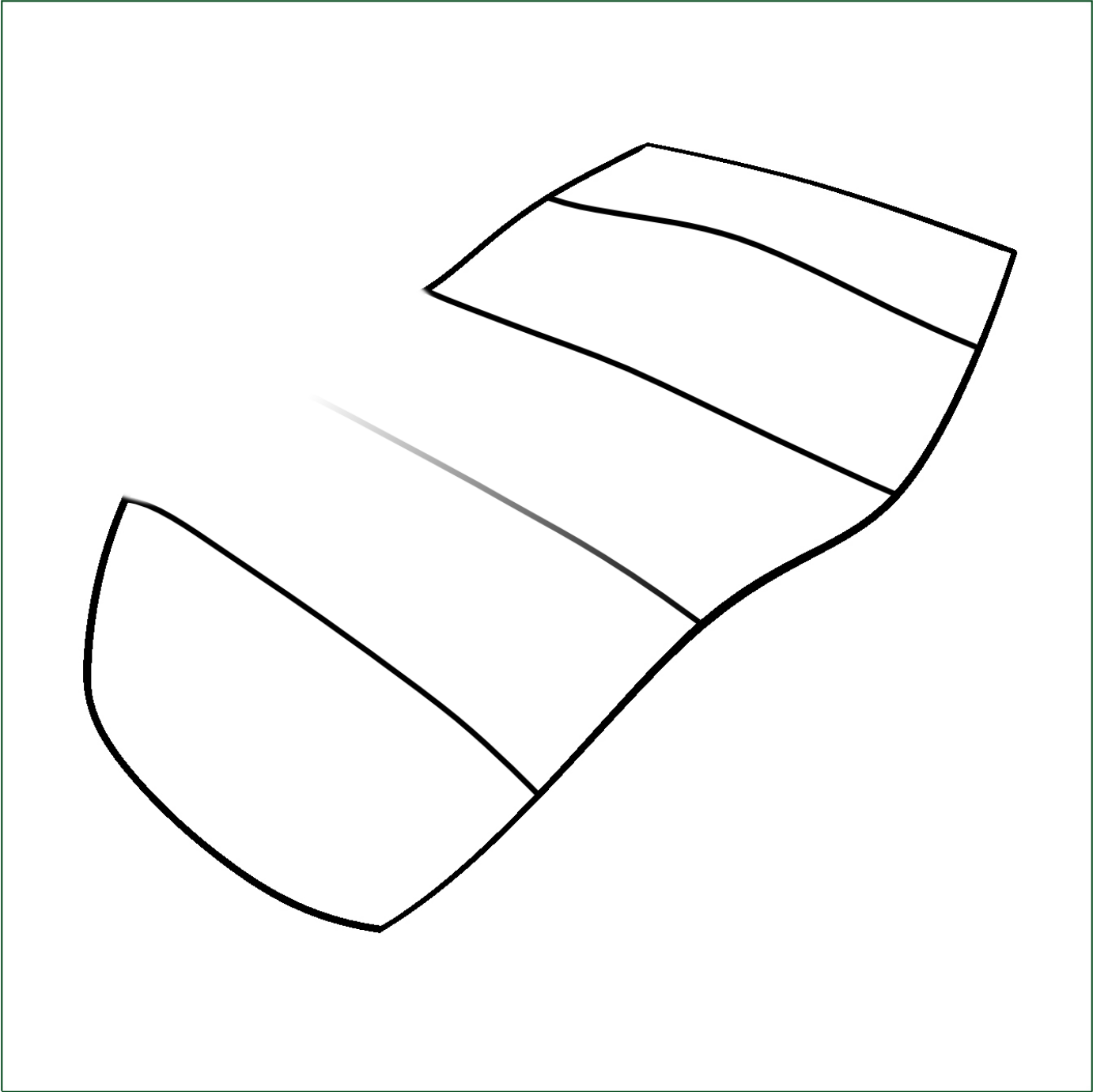
Please fill in the missing curve section.



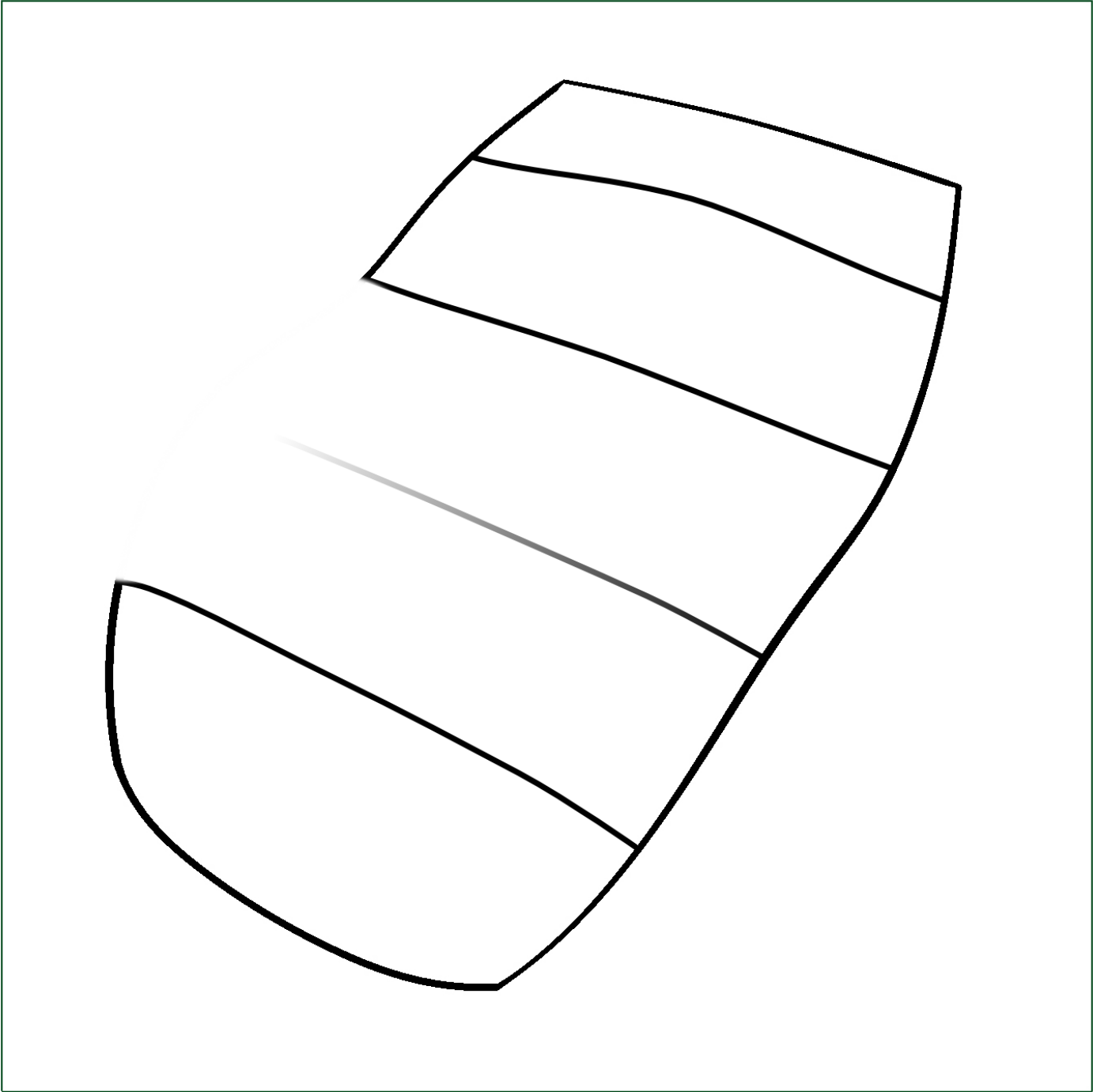
Please fill in the missing curve section.



Please fill in the missing curve section.

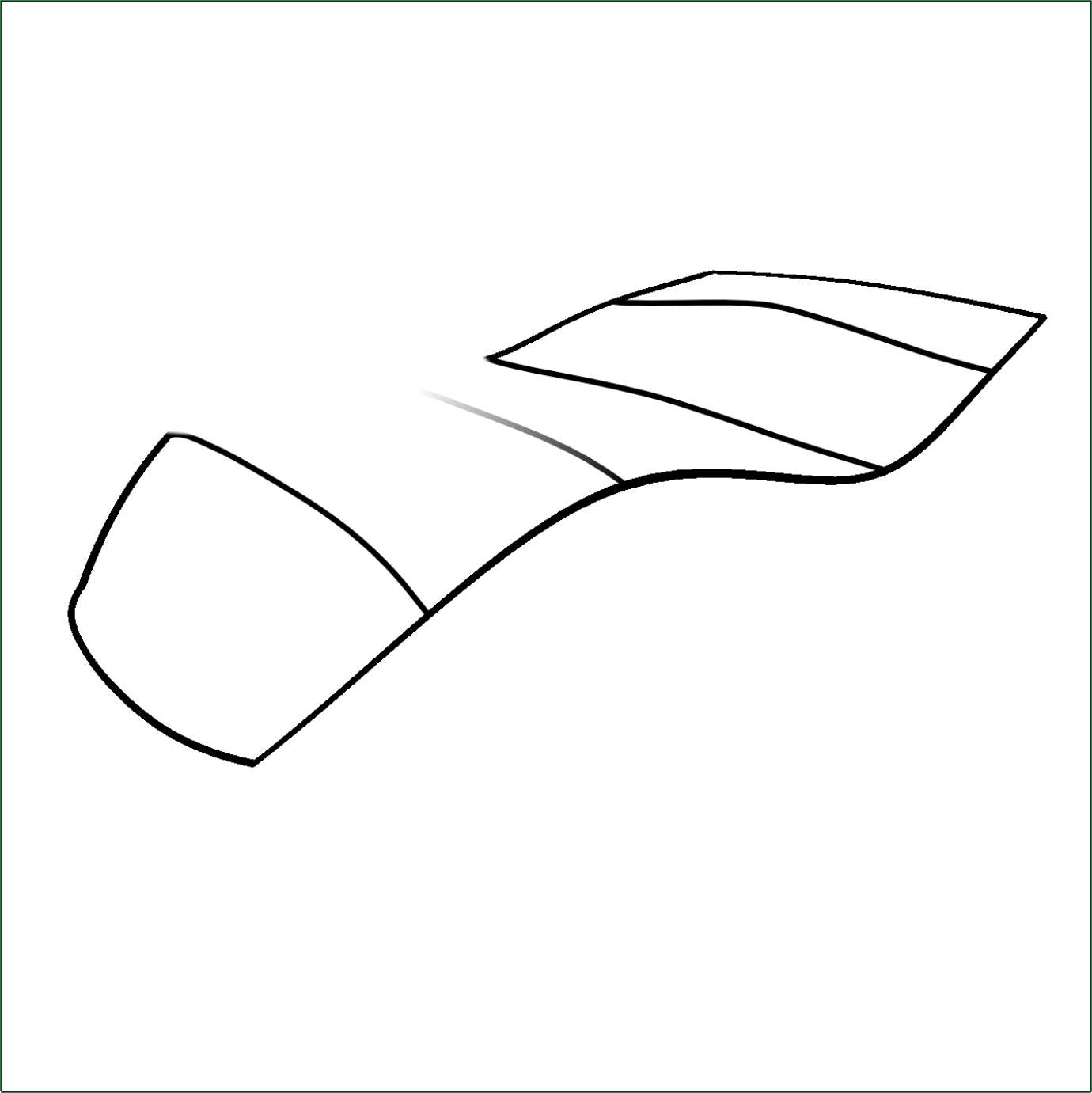


Please fill in the missing curve section.





Please fill in the missing curve section.



## Part 3 – Drawing Curves on Free-Form Surfaces

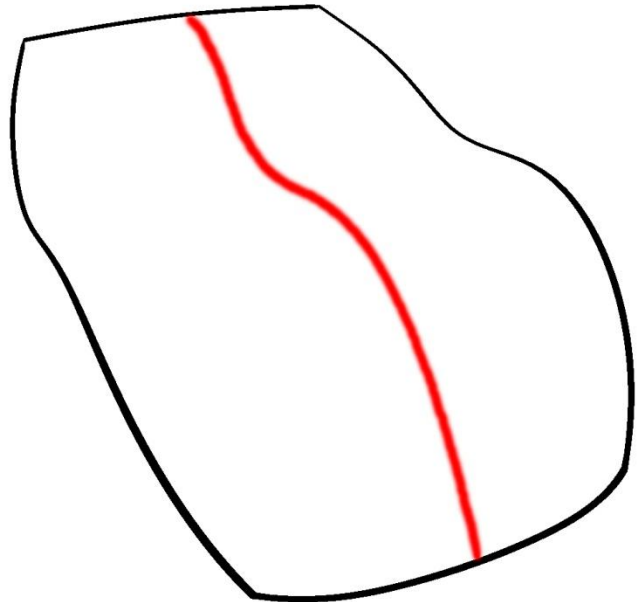
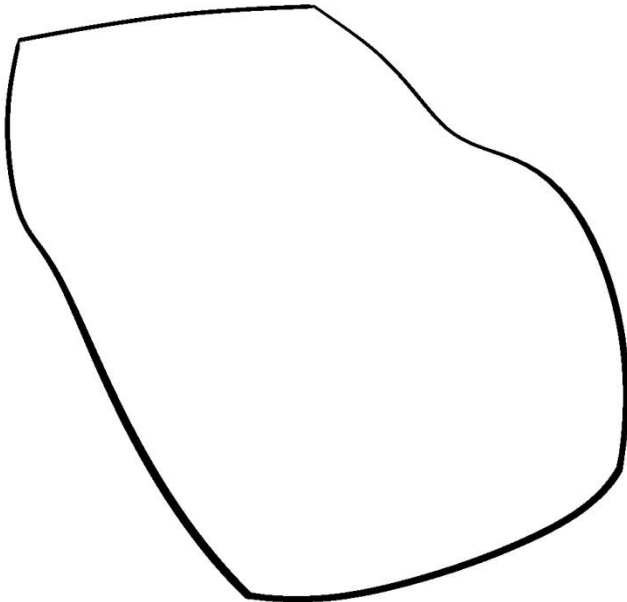
Each of the following pages contains a contour drawing of the 3D surface shown on **Surface Page A**, rendered from a perspective viewpoint. As shown on **Surface Page A**, the two sides of this surface are identical, mirrored around a central plane of symmetry. The **Central Curve** which lies both in this plane, and on the surface, is indicated by arrows on **Surface Page A**.

Please draw the **Central Curve** in each of the following images, as accurately as possible. You may over-sketch your curves as many times as you like, until you are satisfied. **But once you are finished, please trace over your final curve with a dark stroke.**

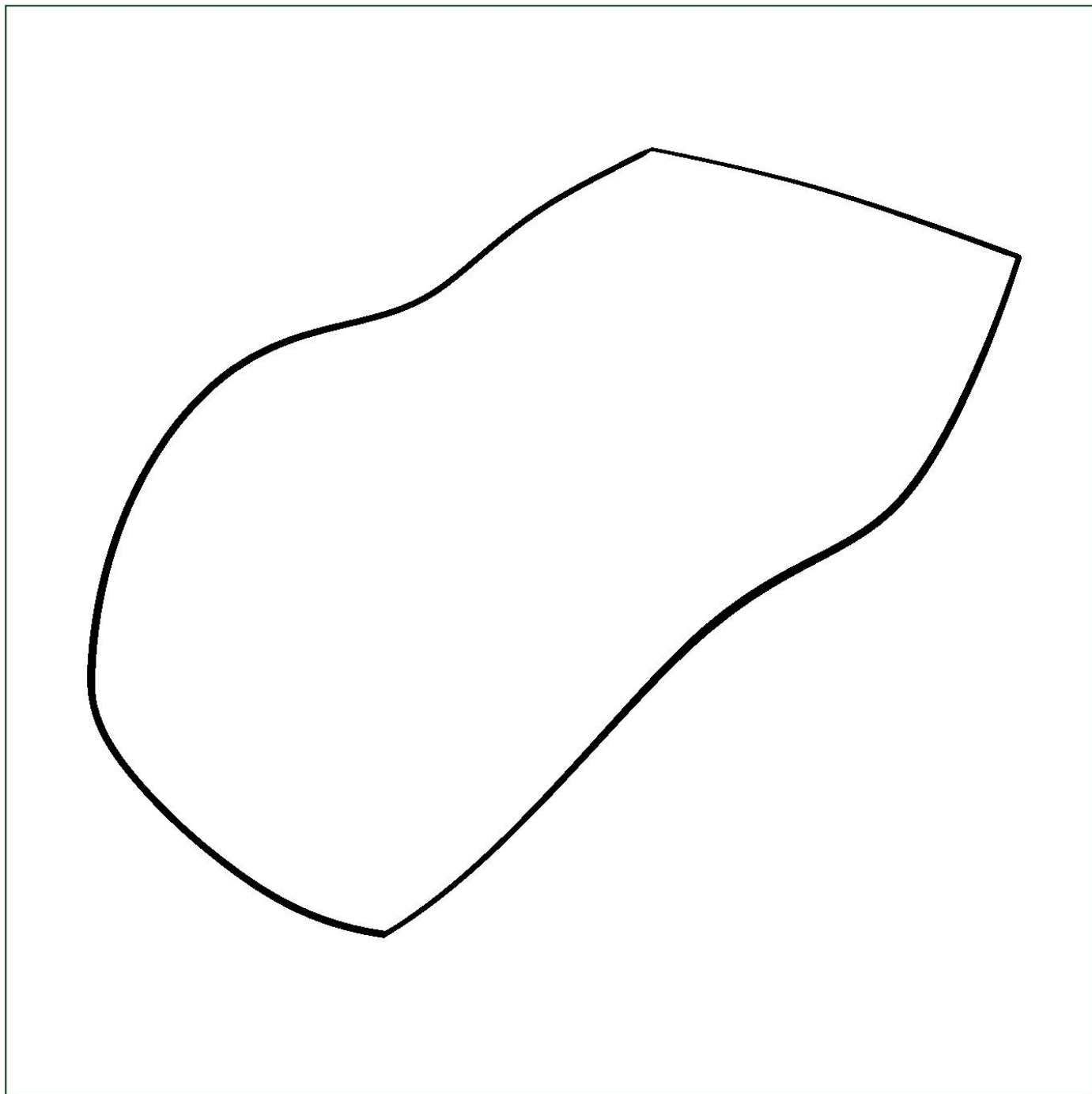
An example is shown below. If you have any questions, please ask the experimenter.

**Example:**

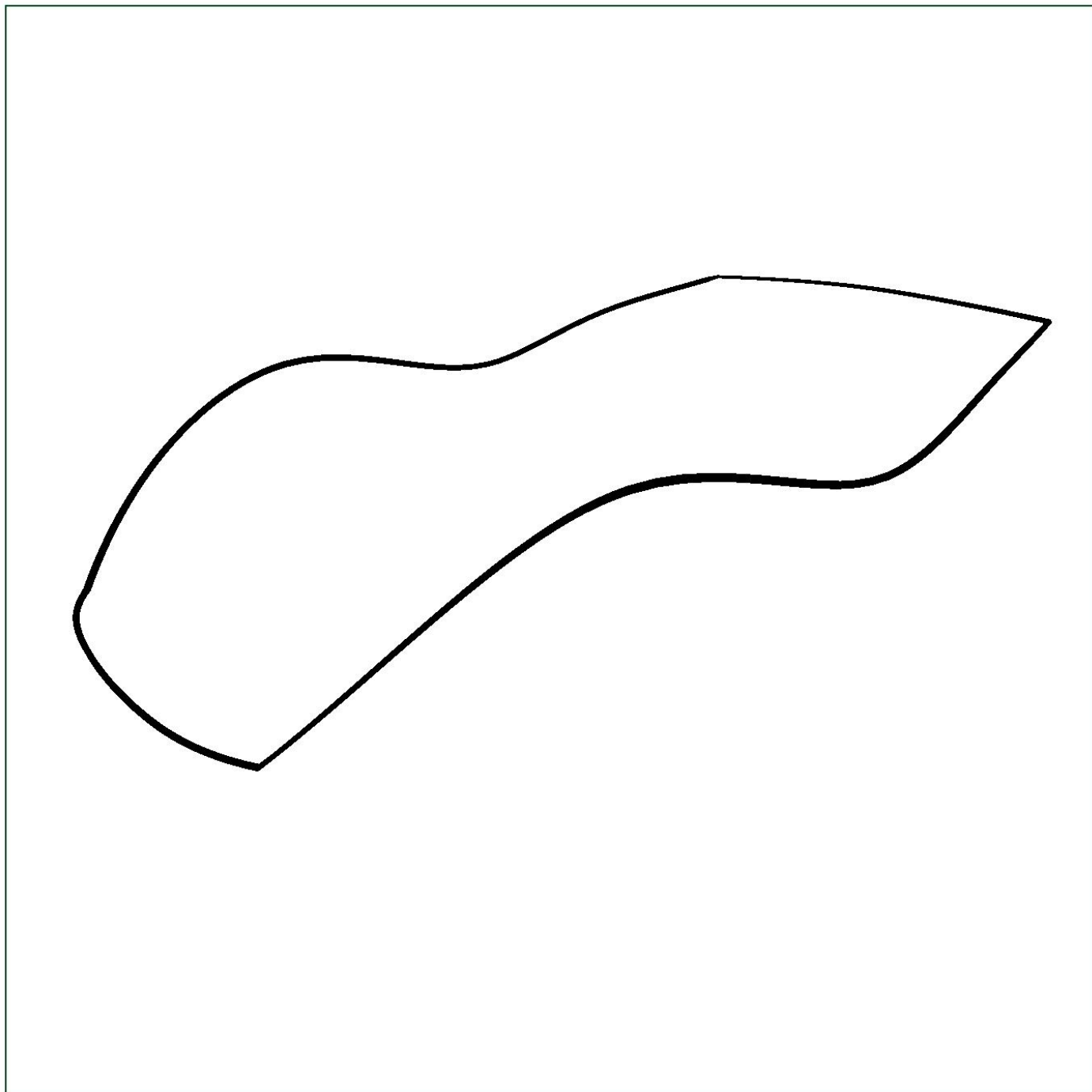
Please draw the center-line along the surface



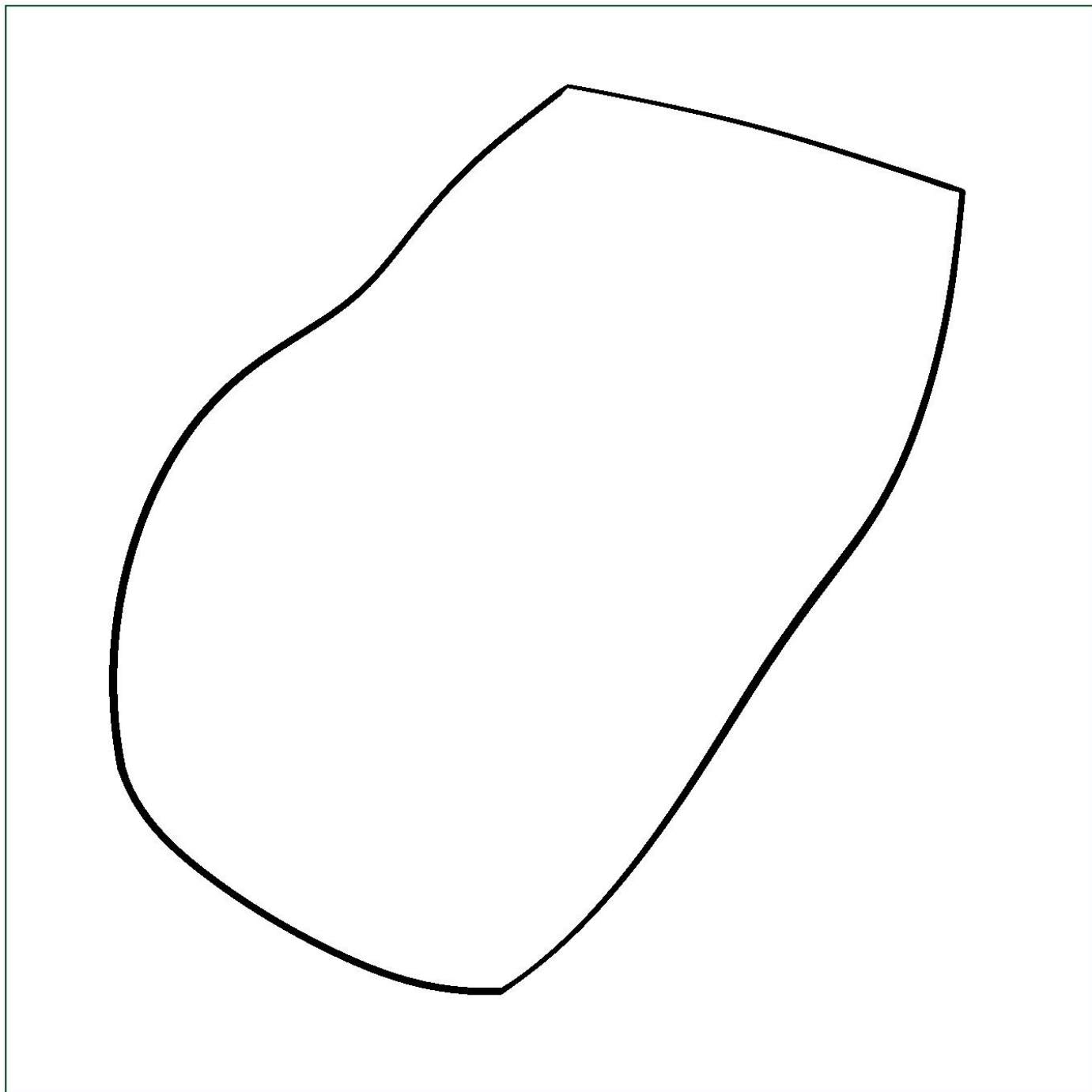
Please draw the center-line along the surface.



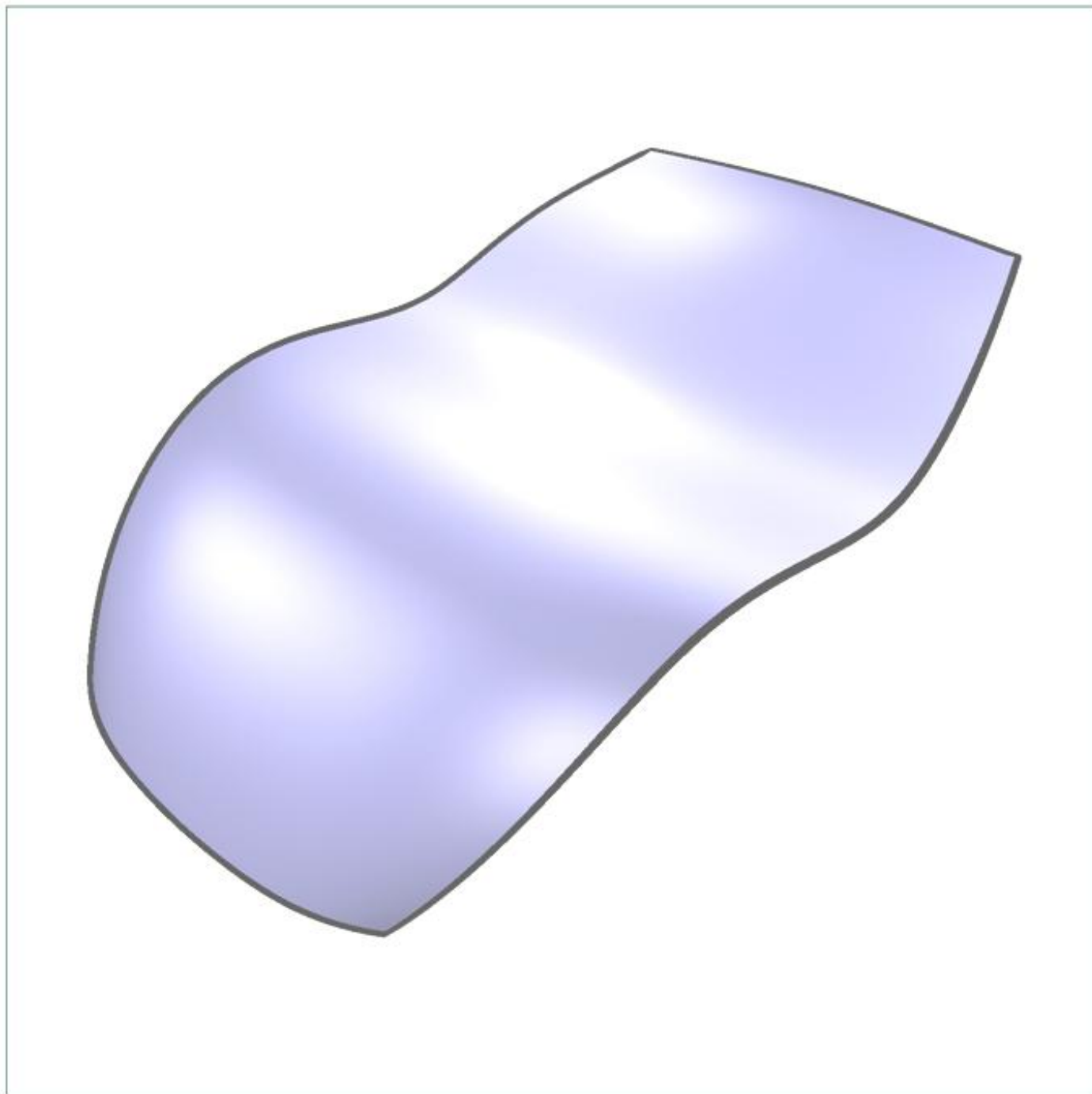
Please draw the center-line along the surface.



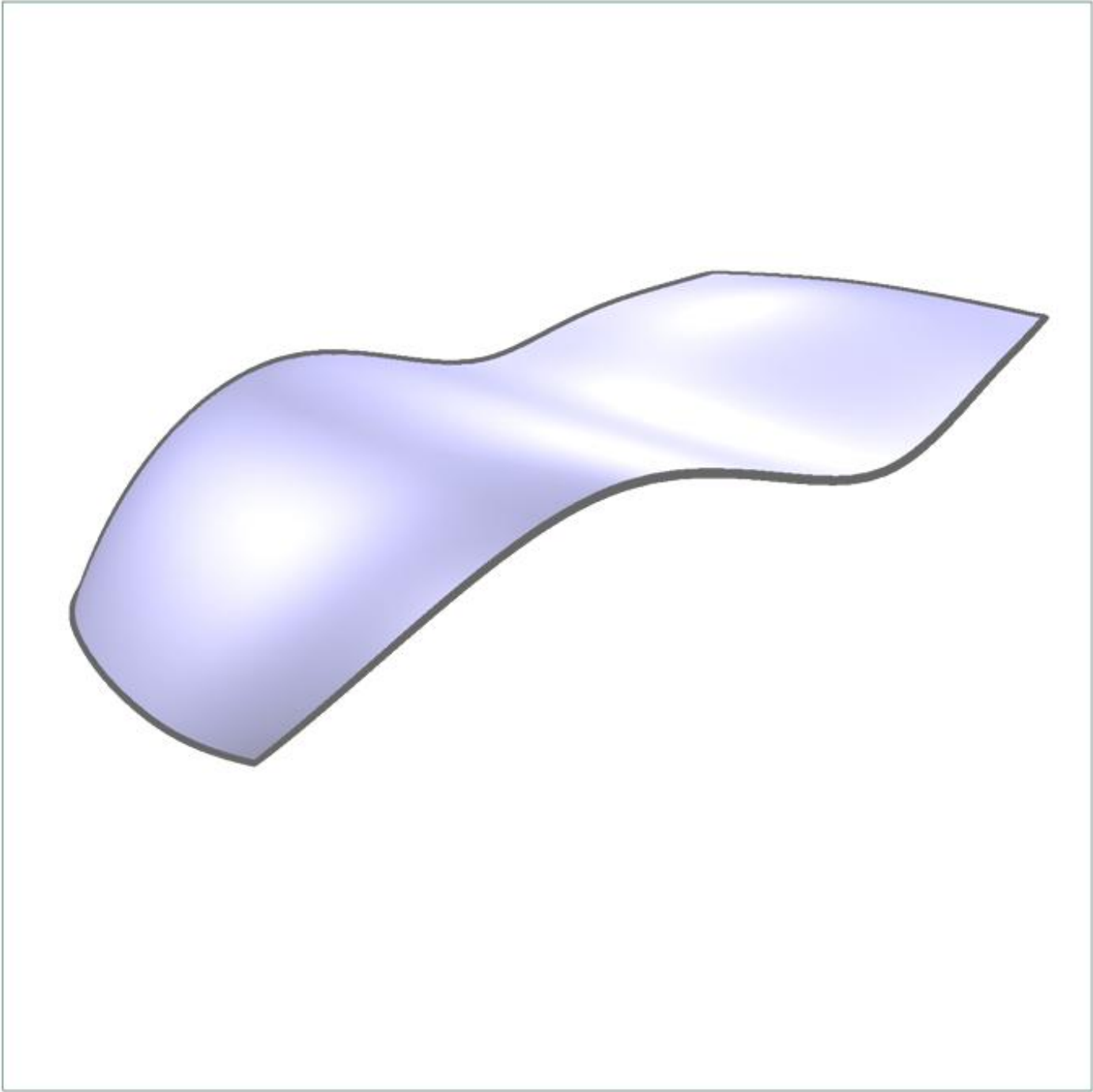
Please draw the center-line along the surface.



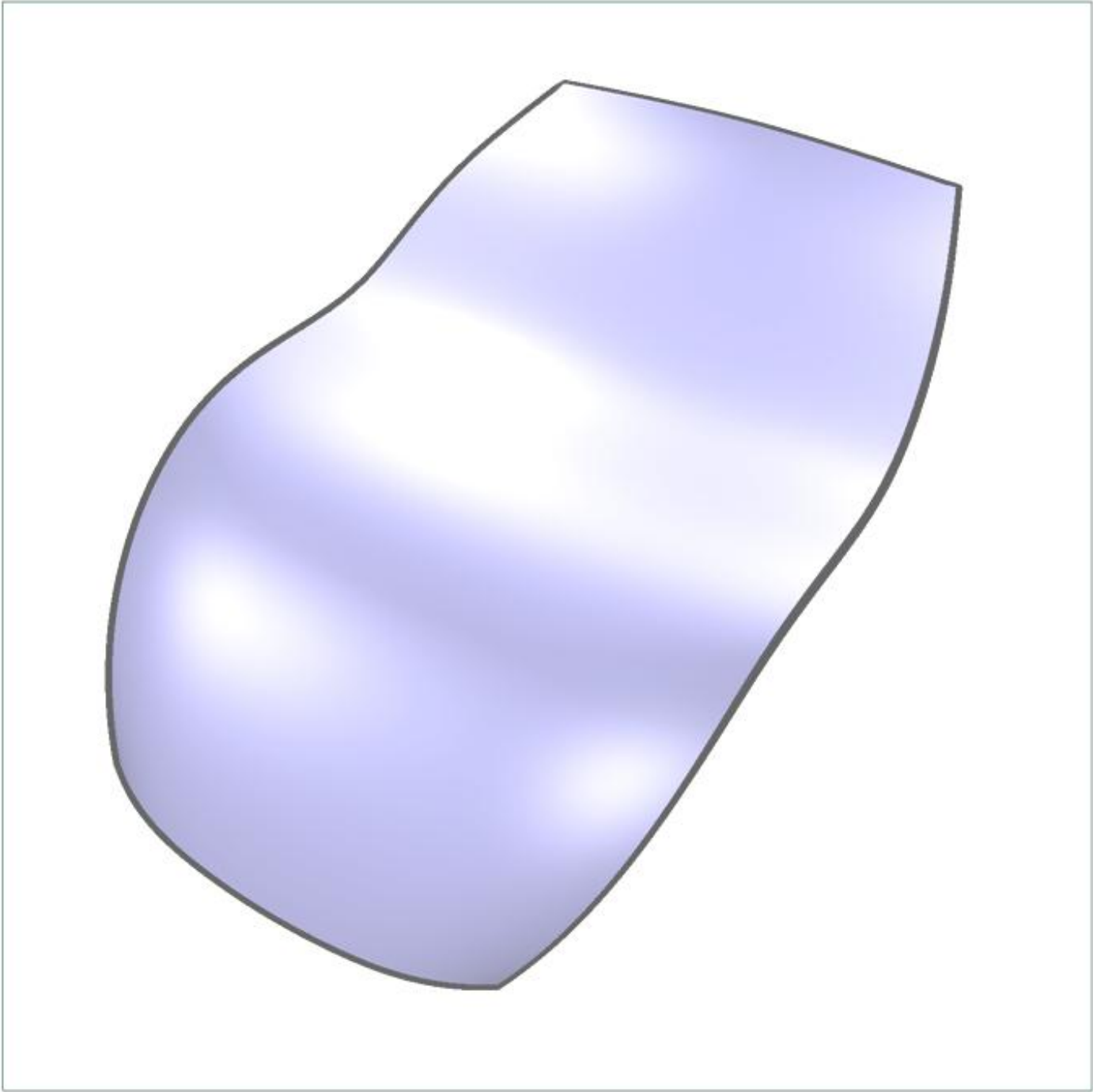
Please draw the center-line along the surface.



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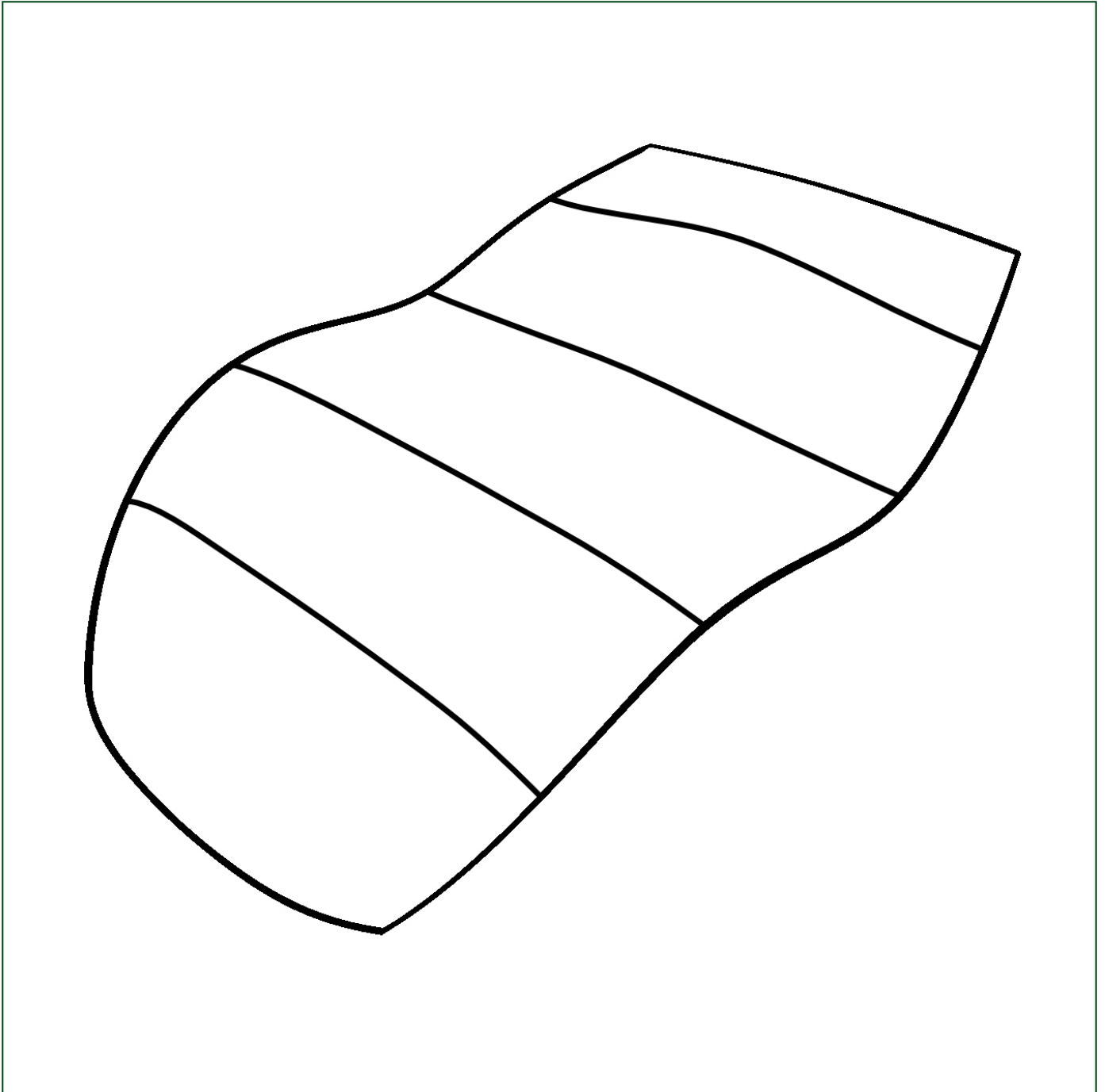


Please draw the center-line along the surface.

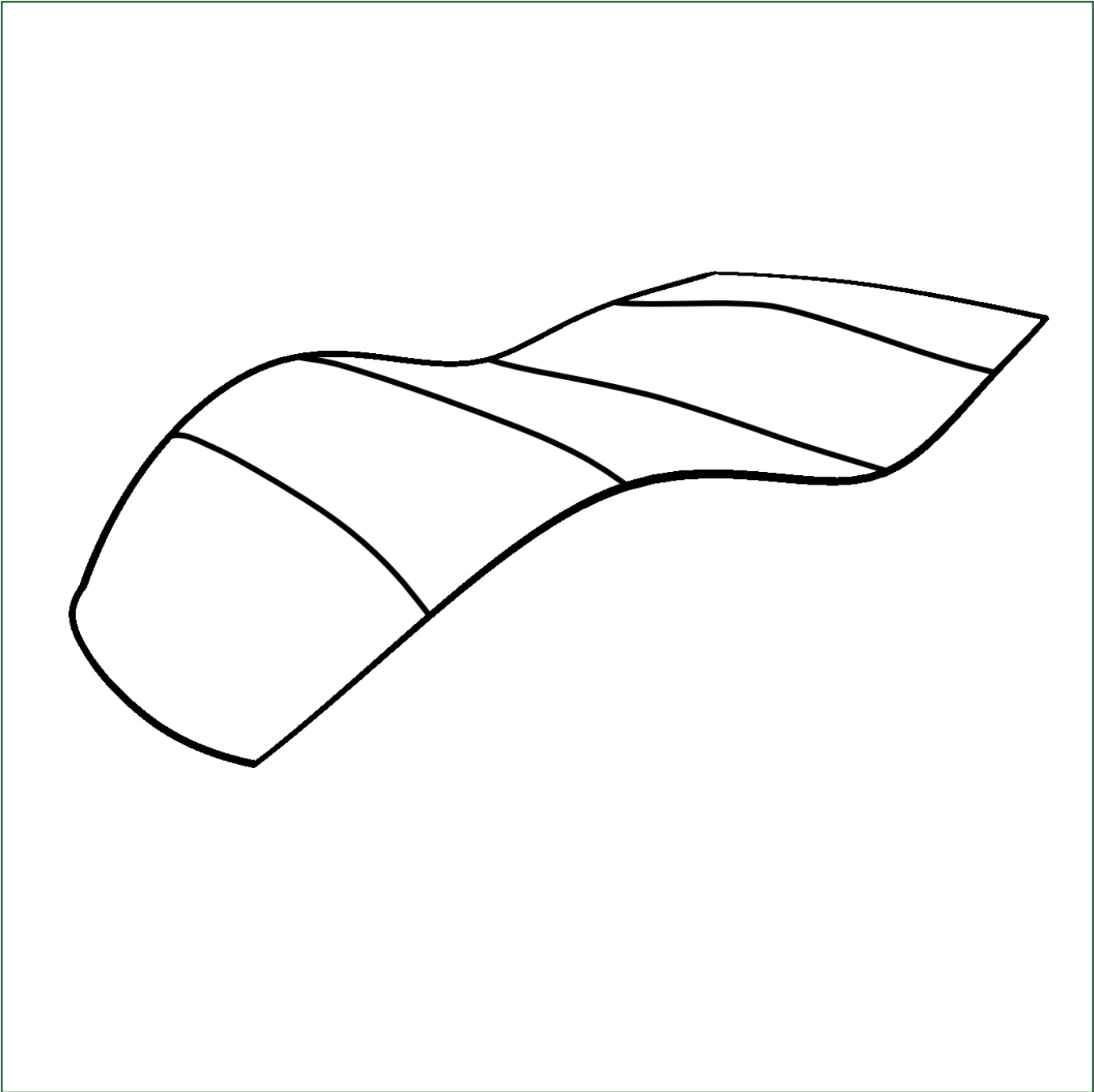




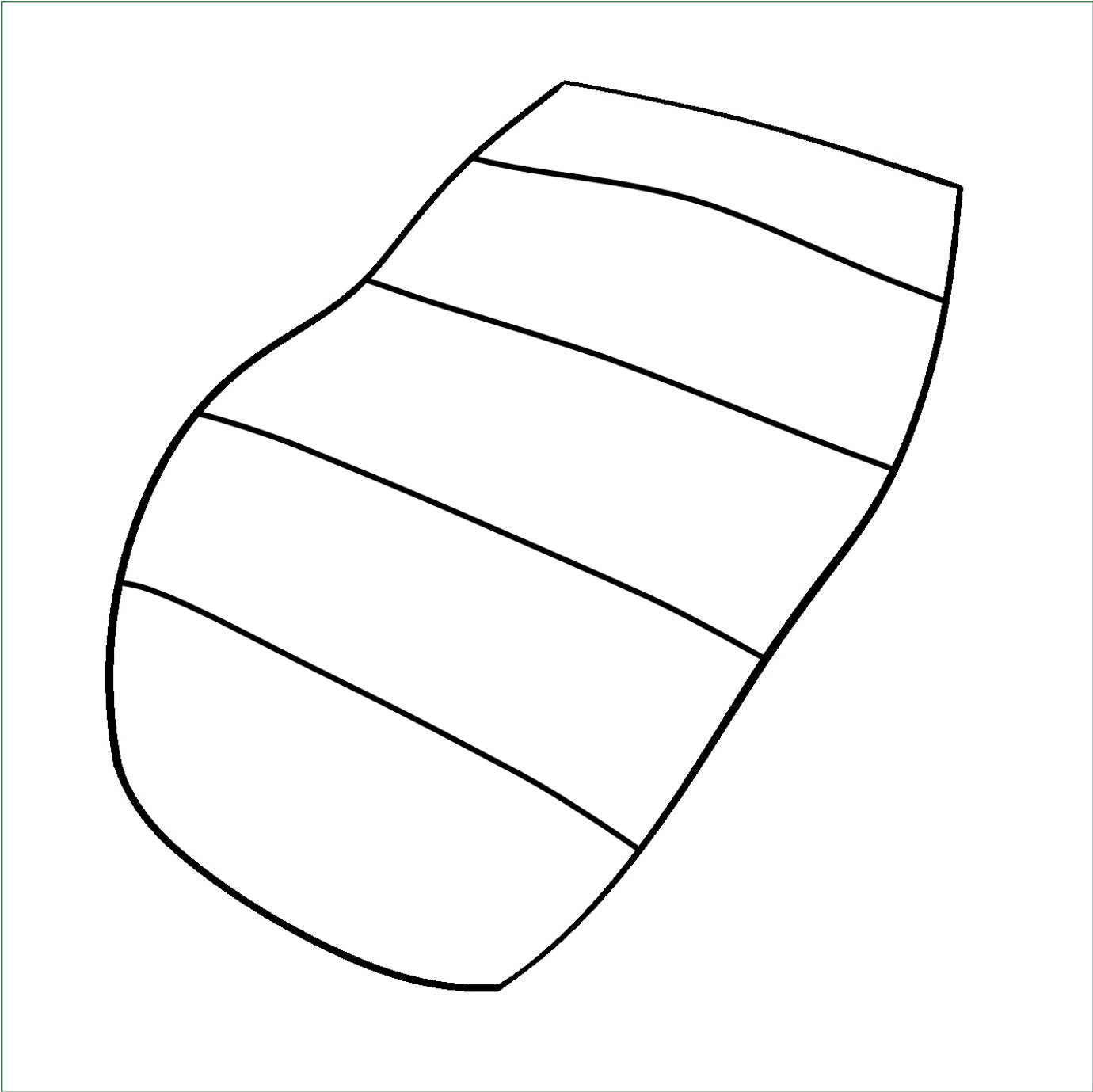
Please draw the center-line along the surface.



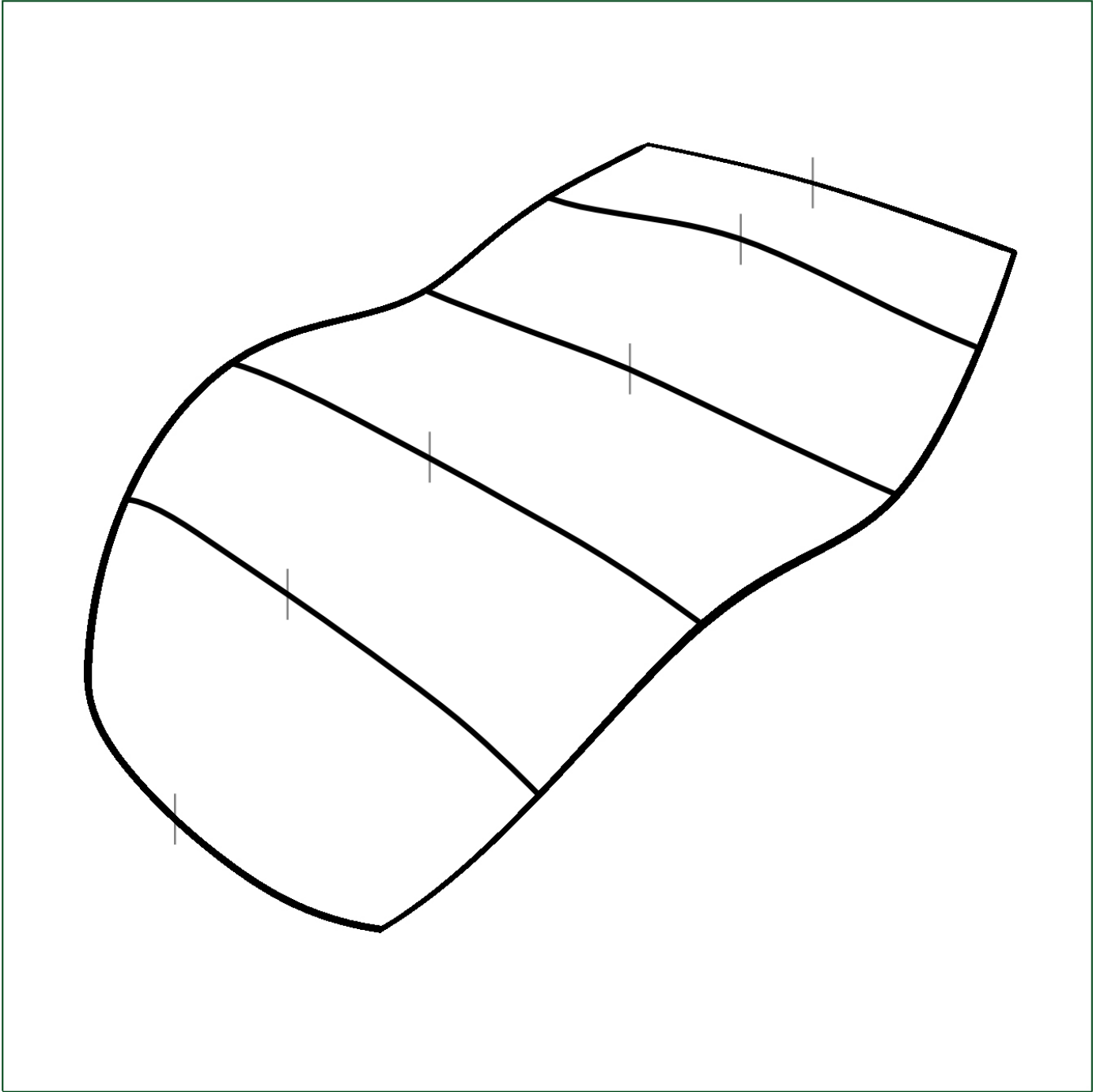
Please draw the center-line along the surface.



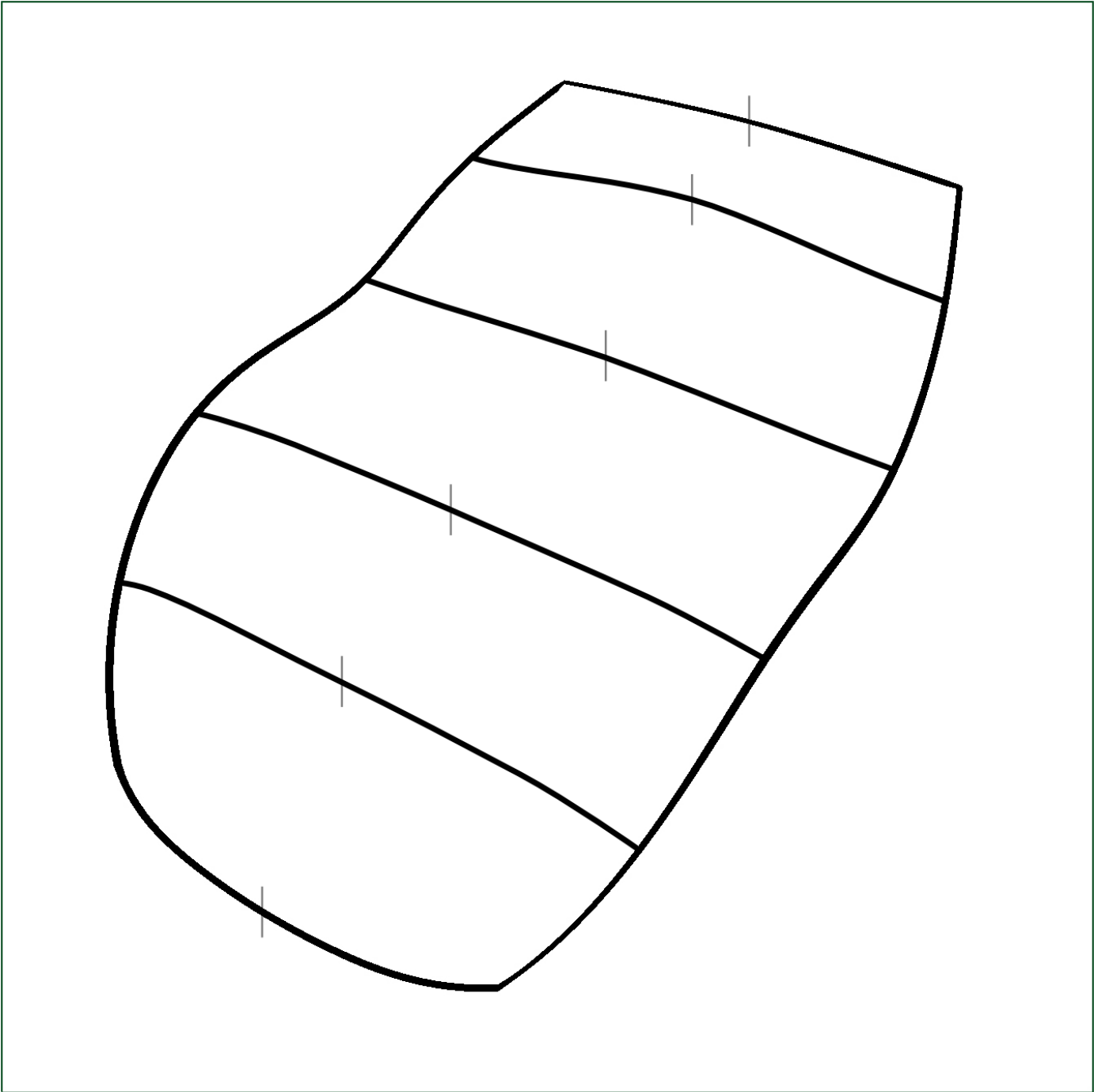
Please draw the center-line along the surface.



Please draw the center-line along the surface.



Please draw the center-line along the surface.



Please draw the center-line along the surface.

