

Thank you for agreeing to take part in this surface orientation study! If at any time you have any questions or concerns, feel free to contact:

These instructions will be shown during each trial. During this study, we will show you images of various three-dimensional objects and surfaces. **Orient the surface normal line as if it were a needle sticking straight out of the surface.** The location to draw on will be initially highlighted using a red box. When you move your mouse, the box will disappear. The length of the line you draw does not matter.

Move the mouse to move one end of the surface normal. The other end of the line is pinned to the object's surface. **Click the mouse to place or unplace the surface normal. When you are satisfied with your placement, click Submit** to move on to the next image.

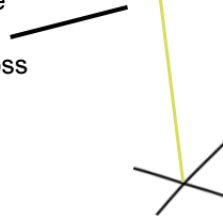
There are no risks associated with this study.

We will begin with **five practice images**. At the end, you will be able to view your answers compared with others' answers.

Tutorial Example

In this example, the green line is the one you'll want to draw

Place your mouse here to indicate a line protruding from the cross



Click to lock the line in place (click again to unlock)

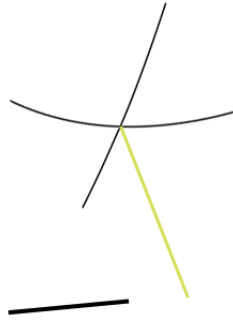
When you are satisfied with your choice, click Submit below



Tutorial Example

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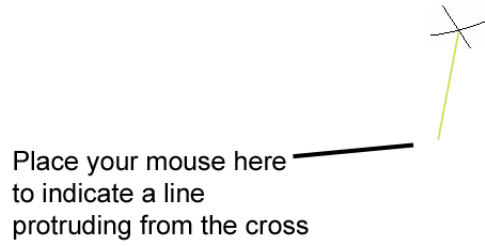
Click to lock the line in place
(click again to unlock)

When you are satisfied with your choice,
click Submit below



Tutorial Example

In this example, the green line is the one you'll want to draw



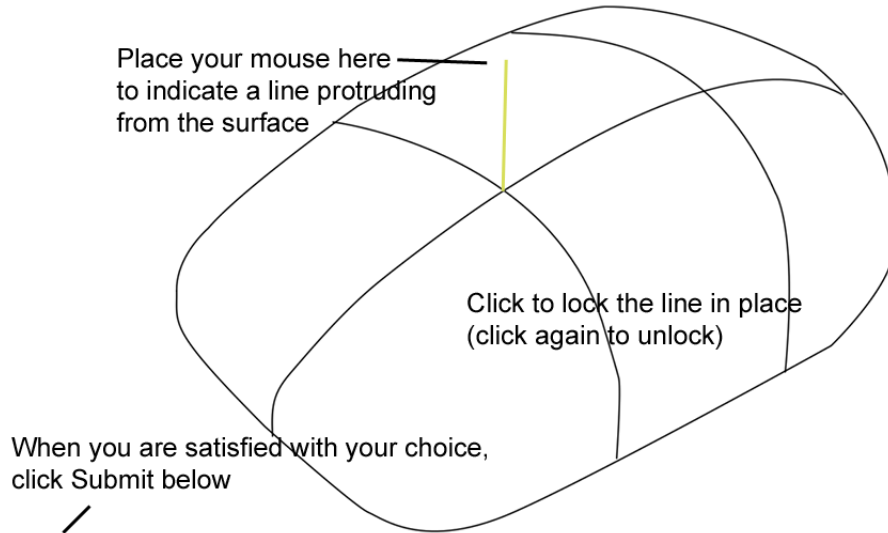
Click to lock the line in place
(click again to unlock)

When you are satisfied with your choice,
click Submit below



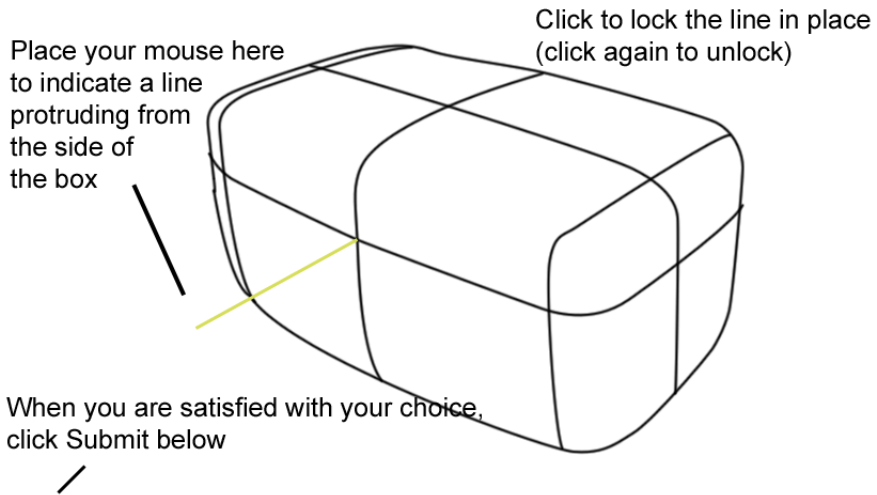
Tutorial Example

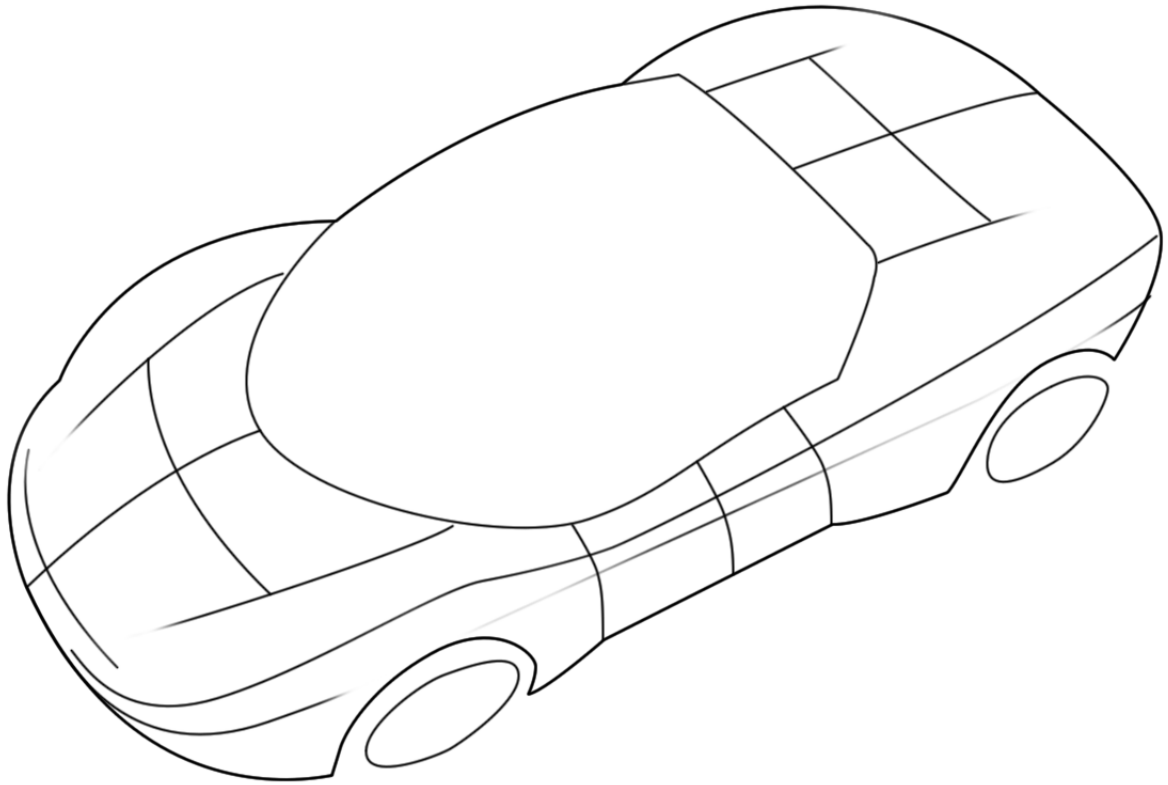
Move your mouse around and notice how the end of the line follows your mouse.

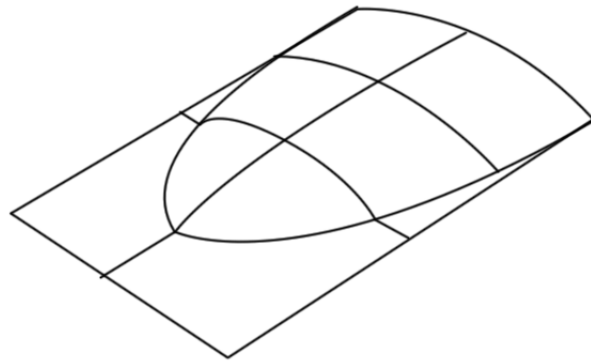


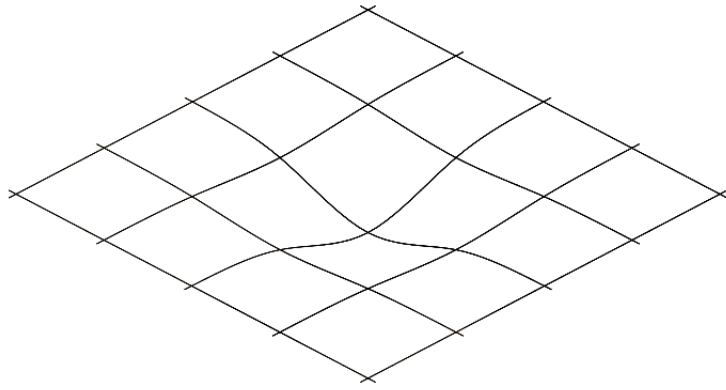
Tutorial Example

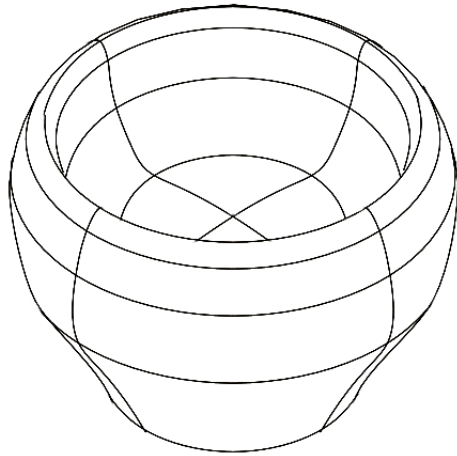
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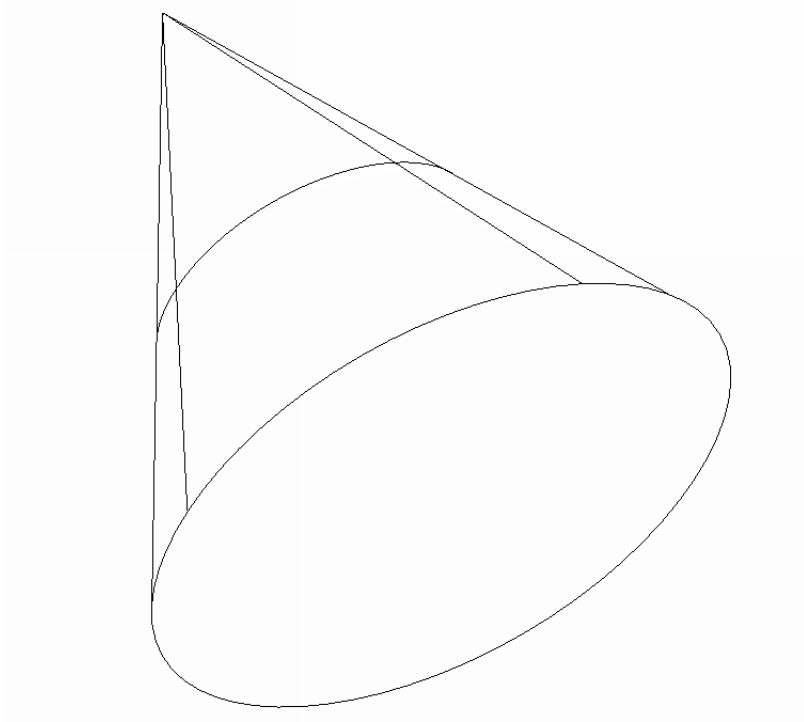


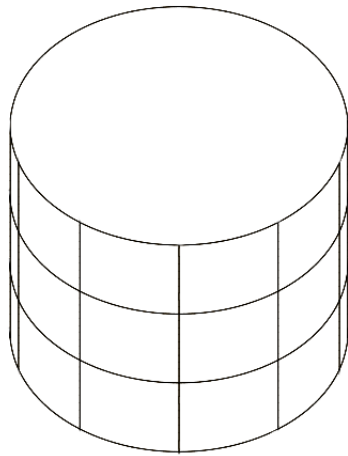


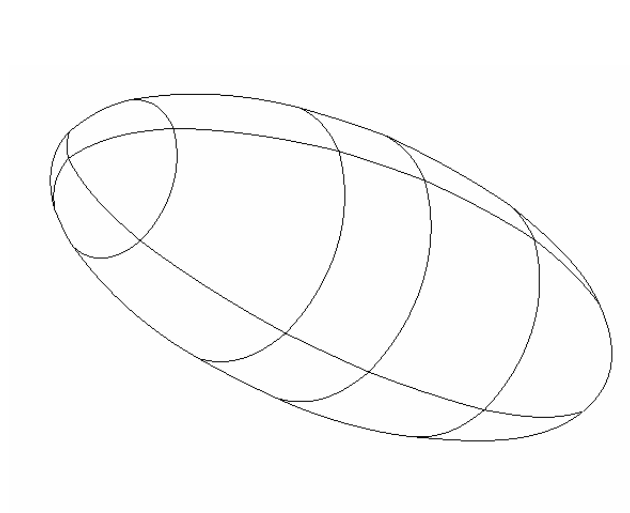


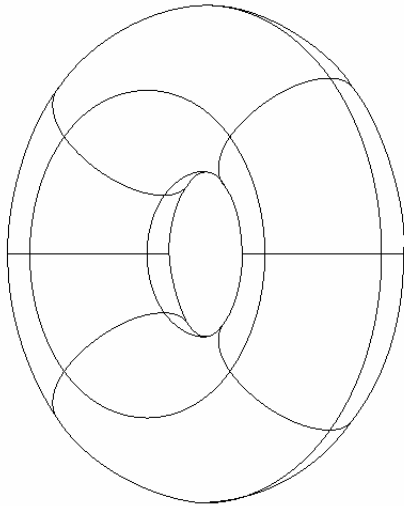


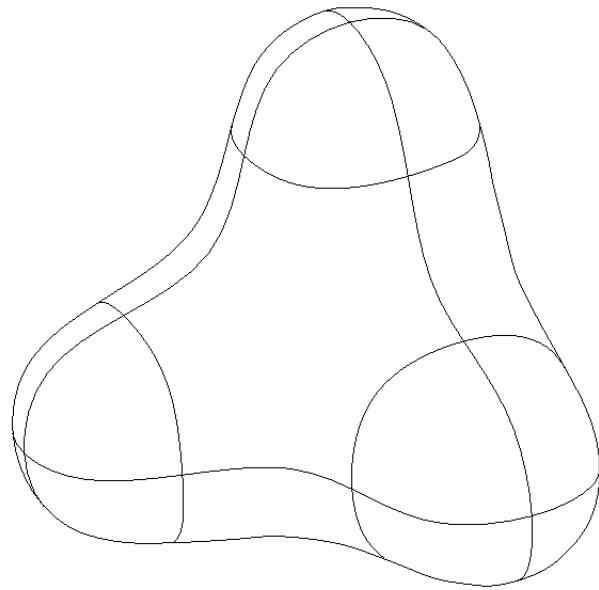


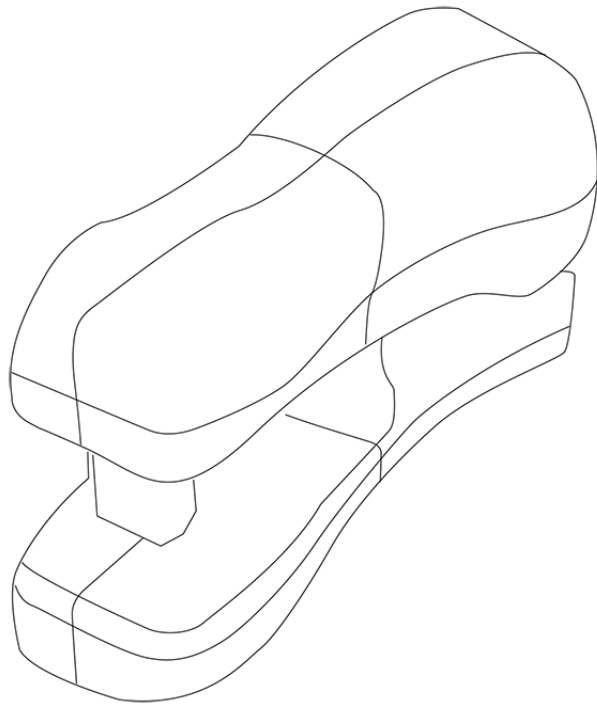


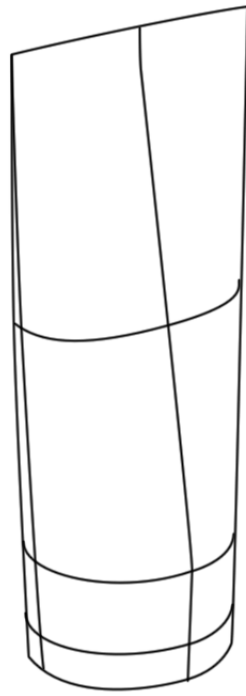








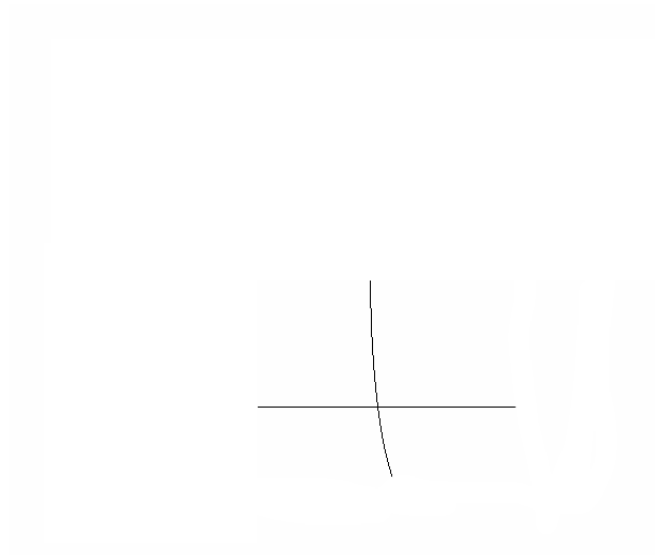




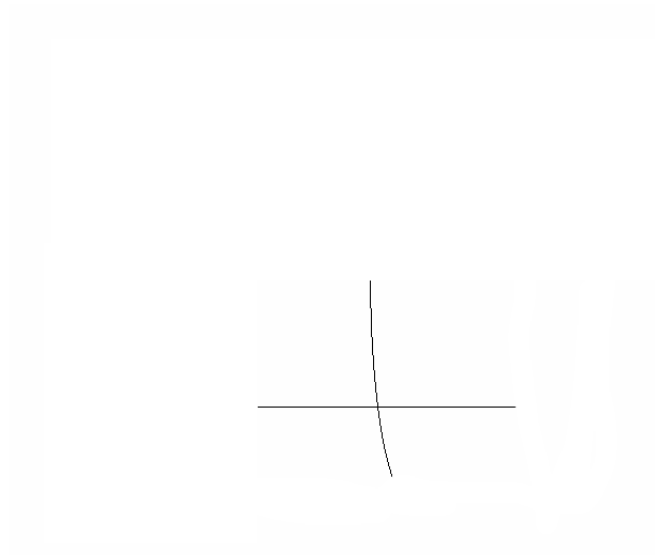


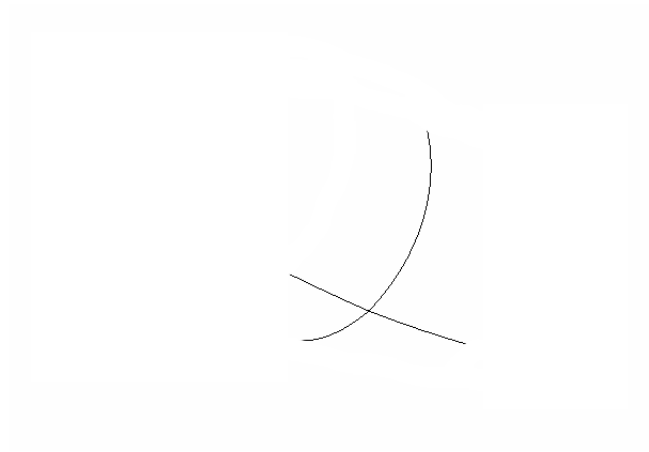
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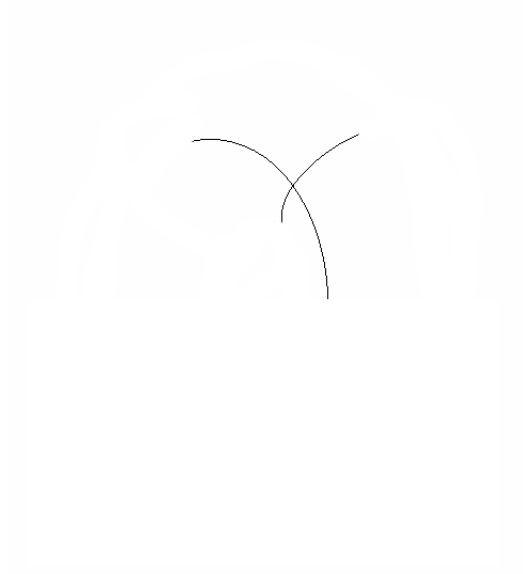
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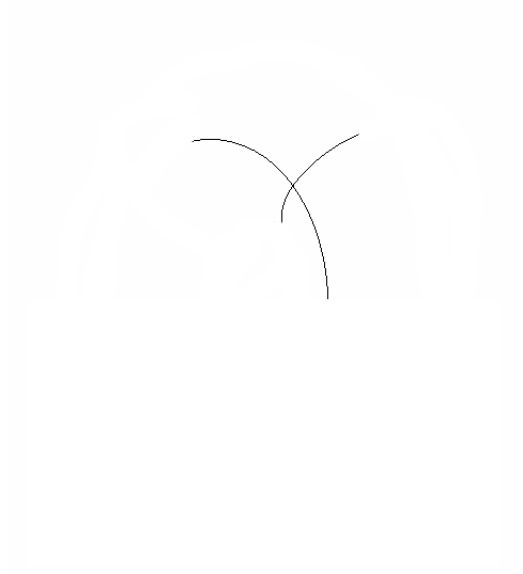
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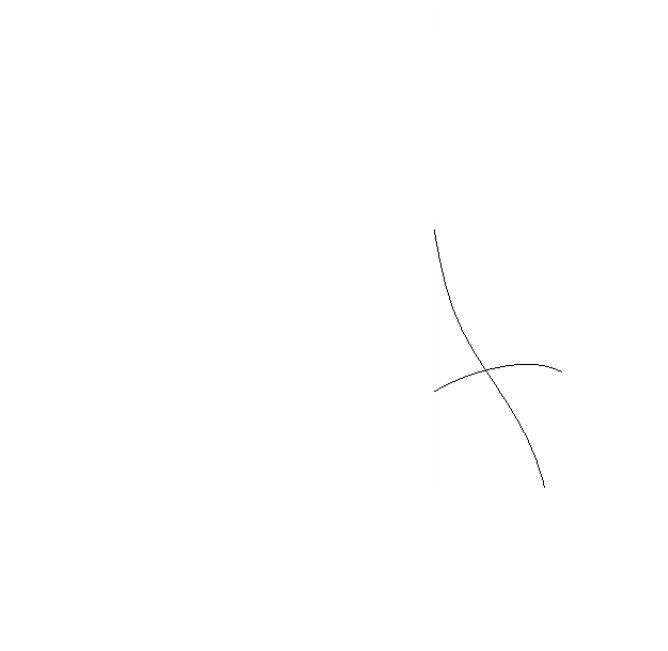
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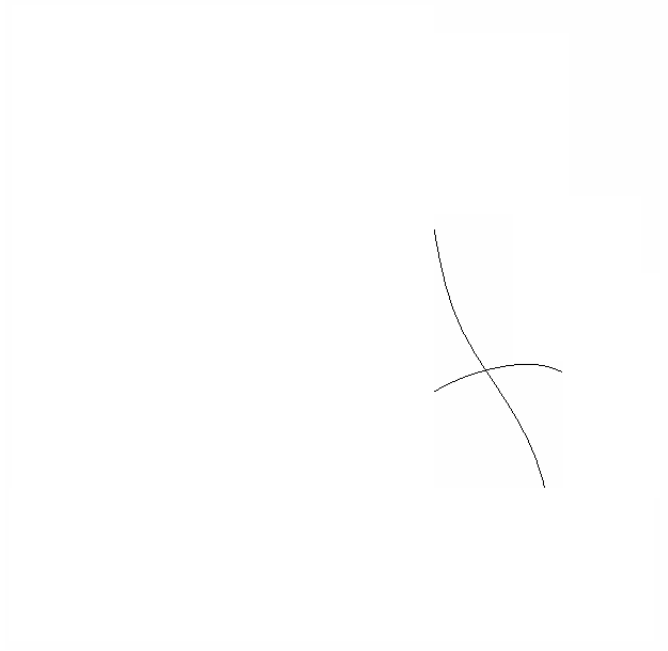


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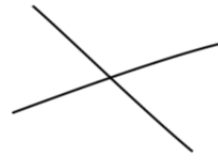




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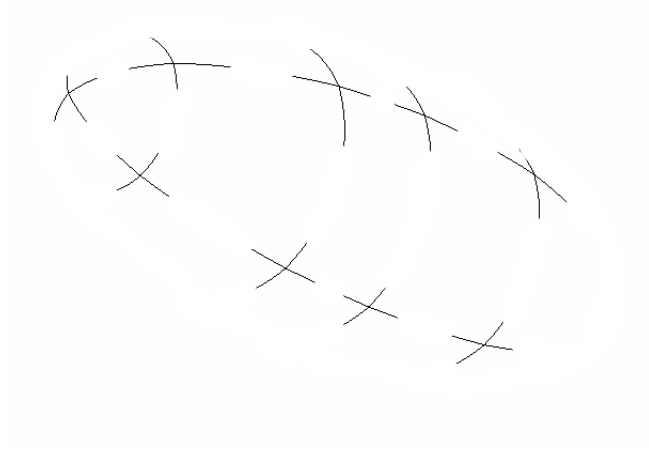
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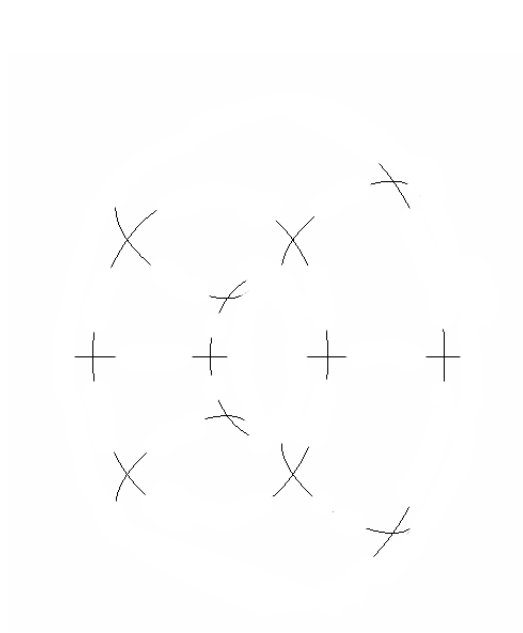
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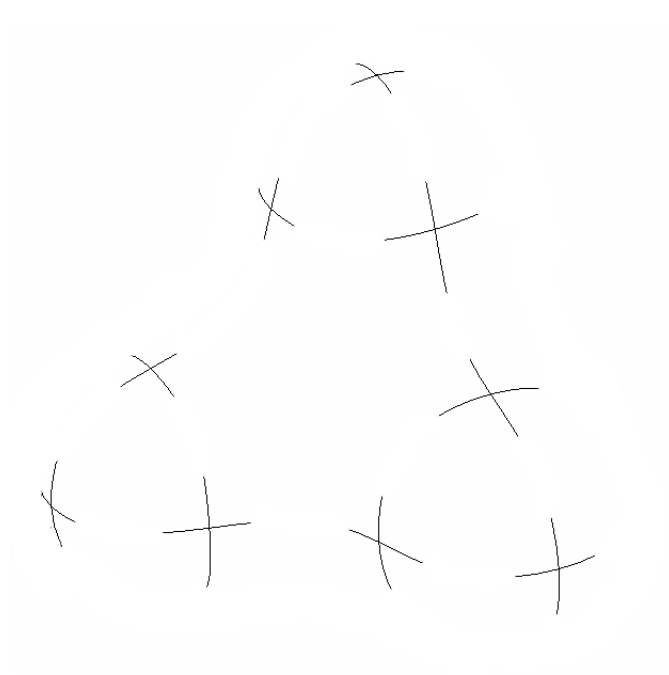












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