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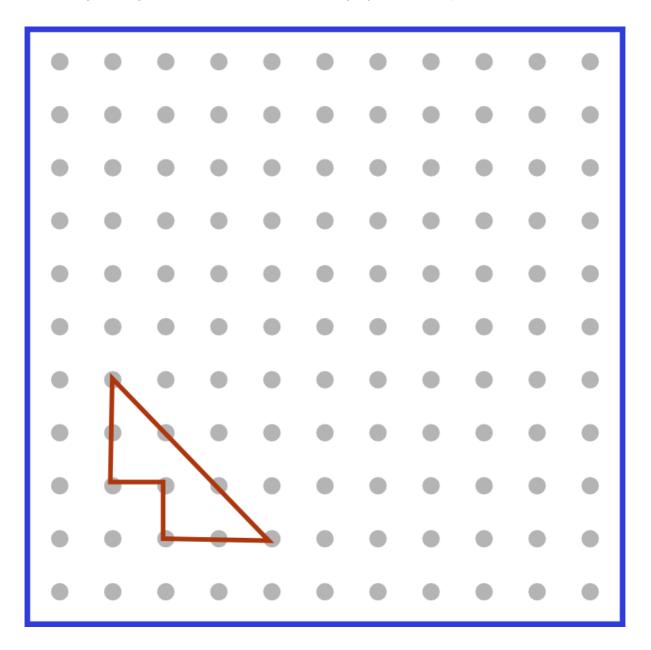
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## Symmetry exercises with a geoboard

You can do these exercises using a geoboard (11x11 points) or on this paper.

### **Assignment 1: Translational symmetry**

Use the given figure to create a translationally symmetrical pattern.

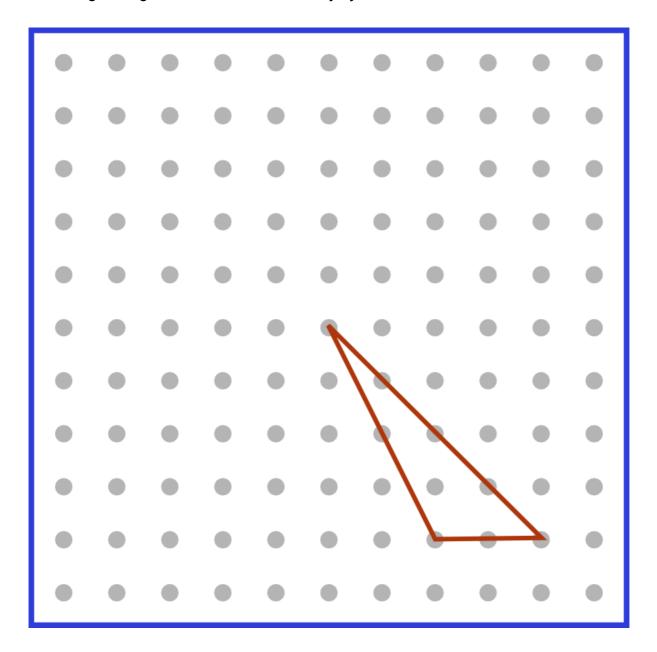


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# **Assignment 2: Rotational symmetry**

Use the given figure to create a rotationally symmetrical, four-bladed "wind turbine."

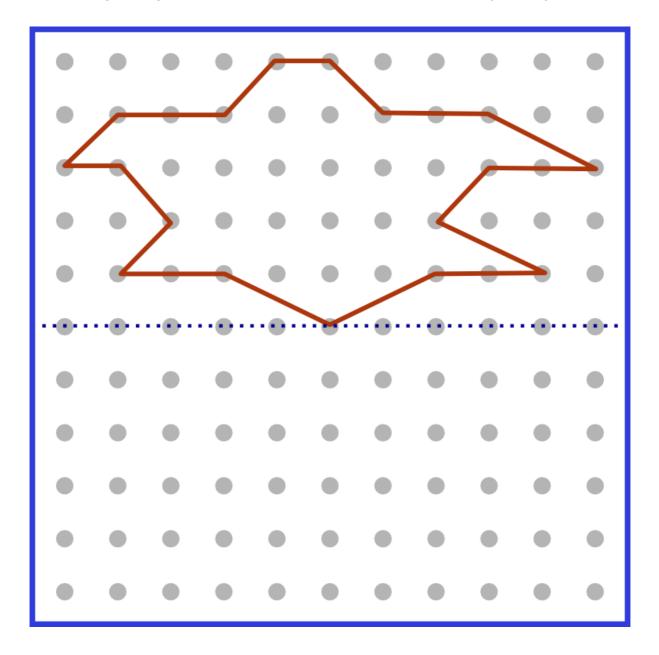


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# **Assignment 3: Reflection symmetry**

Mirror the given figure across the blue dotted horizontal axis of symmetry.



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### **Assignment 4: Reflection symmetry times three**

Mirror the given figure across the dotted axes of symmetry, first into the upper left-hand field. Then mirror the resulting figure into the upper right-hand field. Finally, mirror the figure in the upper right-right field into the lower right-hand field.

