Activity One: Tiling with Two Shapes

Look closely at the example of the shapes on the right. Copy those shapes in the middle of your dot paper below. Now repeat both shapes together in a pattern to form a tiling.

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Anni's Triangles

1. Look carefully at the artwork by Anni Albers. What do you see?
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2. What is a triangle?
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These are isoceles right triangles.

3. In the $2 x 2$ grid shown below on the left, two isosceles right triangles are touching at their vertex (point where two sides meet). Draw a different example of two isosceles right triangles touching at another vertex in the grid on the right.

4. Using the grids and the Anni Albers artwork as a guide, draw as many DIFFERENT pairs of isosceles right triangles as you can. Be prepared to explain why they are all different.

5. Compare your pairs with a neighbor. How do you know that you have drawn all possible pairs? How did you order your pairs to know that you had them all? Explain how the pairs of triangles that you have drawn are different.
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6. Use this sheet of grids to redraw your triangles in a specific order that you have chosen.


