

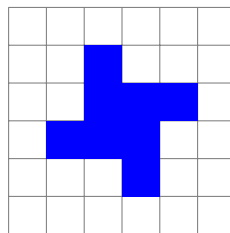
## Tiling the Plane

This is a “paper and pencil” activity where you use two different colored pens or markers to fill in the squares on a  $32 \times 32$ . The general algorithm we will be doing is called *tiling* and you see examples of this every day. Figure 1 shows a tiled floor.



Figure 1: A tiled floor.

In general, tiling consisting of placing one or more shapes having one or more colors on a surface, such as a floor. There are lots of different shapes that we can use when tiling. In this challenge, we will be doing tiling using the following shape.



Imagine you have a bunch of *tiles* having this shape. Also imagine the tiles you have come in two different colors. Can you tile a plane (e.g., a floor) using shape shown above so that adjacent shapes have different colors?