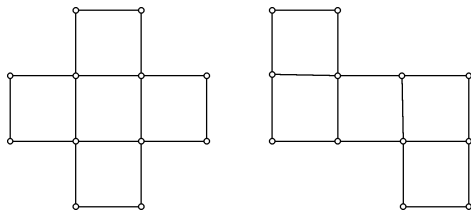


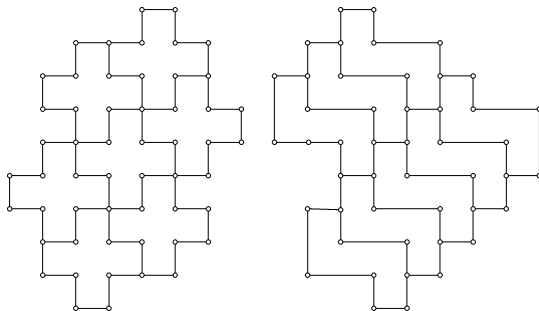
6.4 Tiling with Pentominoes

A **pentomino** is a polygon made from 5 squares of the same size, connected so that each square that touches another square does so only on a complete side. Here are two of the twelve different pentomino shapes that are different.



1. Find the other 10 pentomino shapes. Note that 2 pentominoes are considered the same if one can be obtained from the other by rotation or reflection.

Attractive tile patterns can be developed using pentominoes. (Quadrille paper helps when drawing them.) Here are two patterns using the pentomino shapes shown above.



2. Pick two of the pentomino shapes you found in question # 1, and draw tiling patterns for these shapes.

3. Which of the 12 pentominoes can be folded to form a box with no lid?