

Math 118 - Dr. Miller - Activity #1: Polyomino Perimeters

A *polyomino* is a shape made of several squares where each one touches the next along an entire side. Here are some examples:

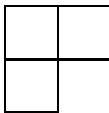
domino



triomino



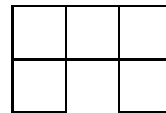
triomino



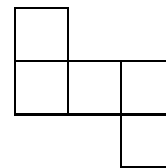
pentomino



pentomino



pentomino



- There are exactly five different quadrominos (polynominoes made of 4 squares). Draw them and also compute their perimeters.

- Describe the shape of the quadromino with the smallest perimeter. Describe the shape of the quadromino(s) with the largest perimeter.

- Draw four other pentominoes that have the same perimeter as this one:



- Why is it impossible to find any other pentominoes that have the same perimeter as this one?

