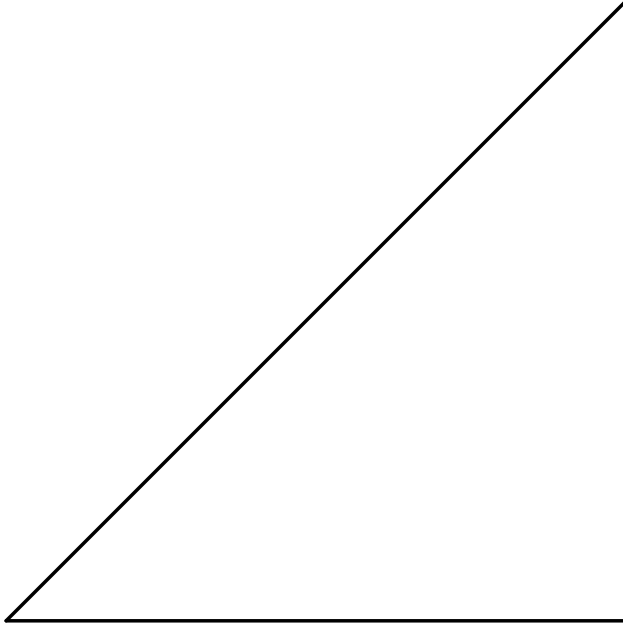
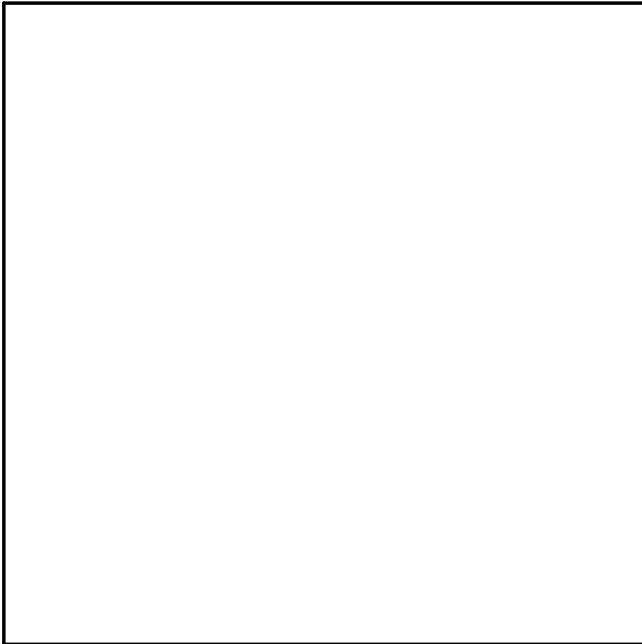


Subdividing Triangles

1. Start with an obtuse triangle—a triangle with one obtuse angle. (A 45-45-90 triangle will be fine too.) Subdivide this triangle into triangles that are all acute.



2. Find the minimum number of acute triangles needed to subdivide an obtuse triangle into acute triangles.
3. Start with a square. Subdivide this square into triangles that are all acute.



4. Find the minimum number of acute triangles needed to subdivide a square into acute triangles.
5. Find a subdivision of the square into acute triangles with any number of triangles greater than the minimum number.