

University of Colorado
Department of Mathematics
Problem of the Month
April 2019

There are three pieces of cheese in a cheese box. Each one is a sector with angle $\alpha = 60^\circ$ at the center. The three pieces are placed in the box in an arbitrary way, except that the vertices of the sectors are at the center of the box.

Show that roaches A , B , and C at the interval midpoints are at the same distance from each other. That is, the roaches are located at the vertices of an equilateral triangle.

