

1067-P1-2340

Robin Leigh Blankenship* (r.blankenshi@moreheadstate.edu), **Michael Blankenship** and **Craig Hamilton**. *Counting the Number of Hextile Knot Mosaics in a Diagram with Fixed Center and Radius*. Preliminary report.

Knot mosaics, embeddings of knot diagrams in square grids, inspired the creation of hextiles: regular hexagons with zero, one, two, or three strands connecting midpoints of edges in various over and under crossing patterns. After creating hextiles out of ceramics and introducing the puzzle of tessellating hextiles to form knots and links, natural mathematical questions arose. One such question is, “How many hextile knot mosaics are there?” This has been determined for a given radius around a fixed center tile using a computer program written in C#. (Received September 22, 2010)