Geometric Puzzles: Tiles and Rep-Tiles

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Spoiler alert: along the way, I will reveal the answers to some questions. At various times, we may end up moving on before you've solved something. Sorry.

This handout is available in a clickable version at mathed.page/talks.html

Links

free downloads for classroom use and for your continuing entertainment

Workshop handouts:

<u>Three-Pentomino Puzzles</u> | <u>Scaling SuperTangrams</u> <u>One-Inch Grid Paper</u> | <u>Triangle Paper</u>

Virtual manipulatives:

Tangrams | Virtual Grid Paper | Pentominoes

<u>Geometric Puzzles in the Classroom</u> is my main article on this topic. <u>Puzzles in Math Education</u> provides a philosophical framework. Links to all relevant materials (including the below): <u>Geometric Puzzles</u>

Possible hands-on introduction to tangrams: Tearing Tangrams

Polyomino Lessons (puzzles on grid paper)

More on pentominoes:

<u>Pentomino Labs</u> <u>Tiling Rectangles with Pentominoes</u> (puzzles on grid paper) <u>Pentomino Books</u>

SuperTangrams

Rep-tiles

Related: <u>Geometry Labs</u> <u>Symmetry</u> <u>Manipulatives</u> <u>For a Tool-Rich Pedagogy</u>