

Panamanian Rubik's Cube Mosaics and Other Fun Puzzles

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FUNDAPROMAT

The **Panamanian Foundation for the Promotion of Mathematics** is a non-profit Foundation based in the Republic of Panama.

Mission: change the world's perception so that one and all can experience mathematics as accessible, relevant and inherently joyous.



Math Circle Institute at ND



Rubik's Cube Mosaics



Rubik's Cube Mosaics



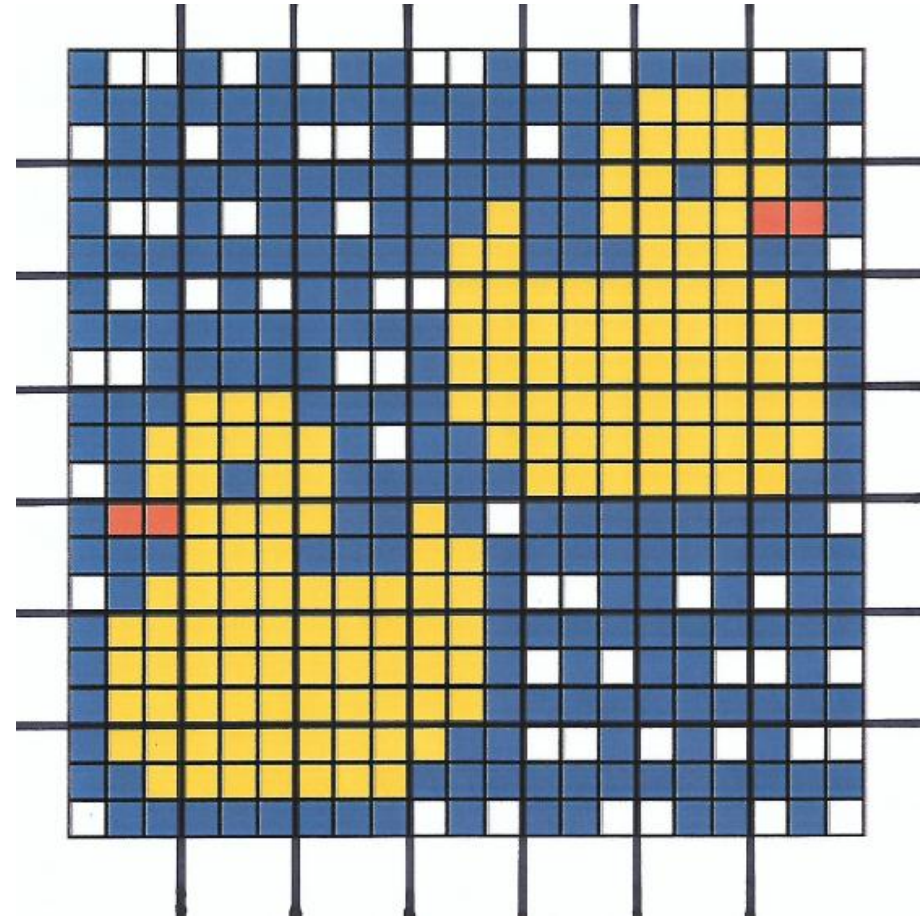
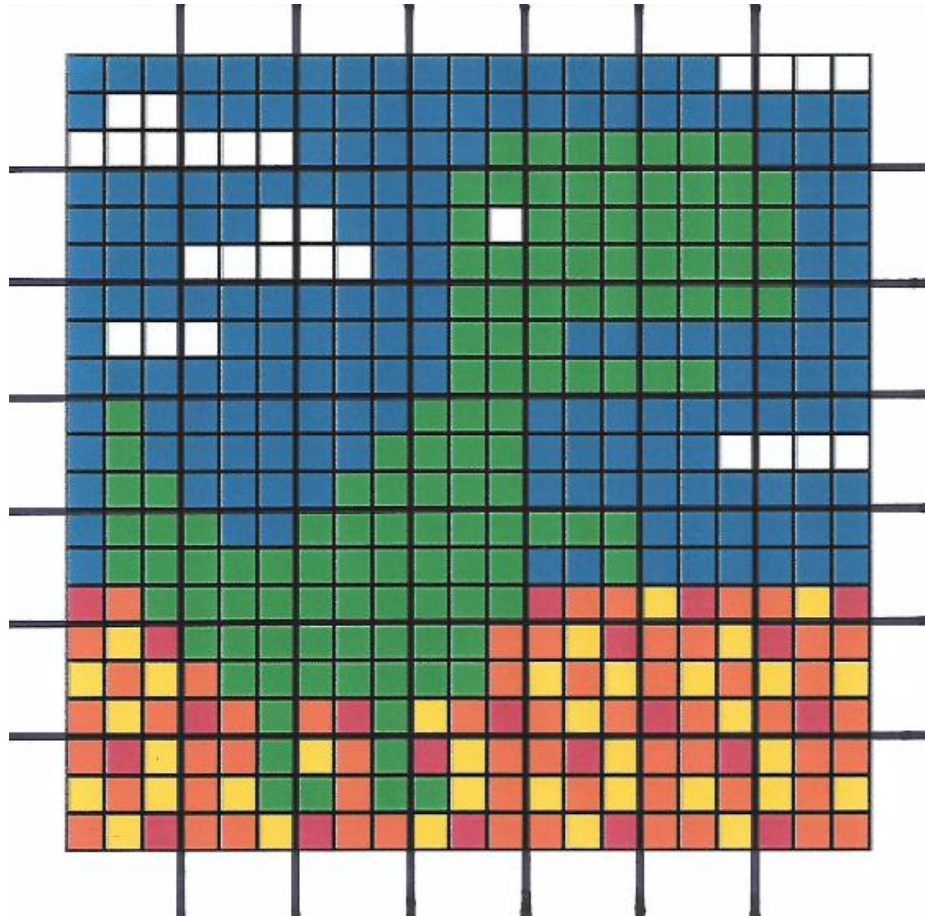
- ▶ Created by arranging a collection of Rubik's Cubes so that each cube acts as a single "pixel" in a larger picture.
- ▶ Much simpler than solving the entire Rubik's Cube since you only need to solve one face.



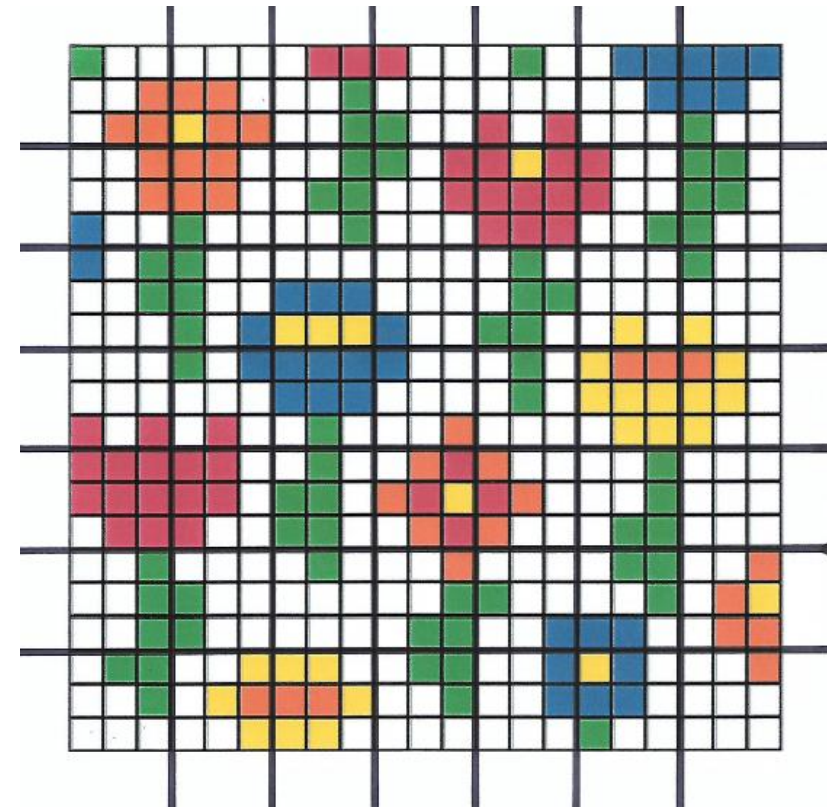
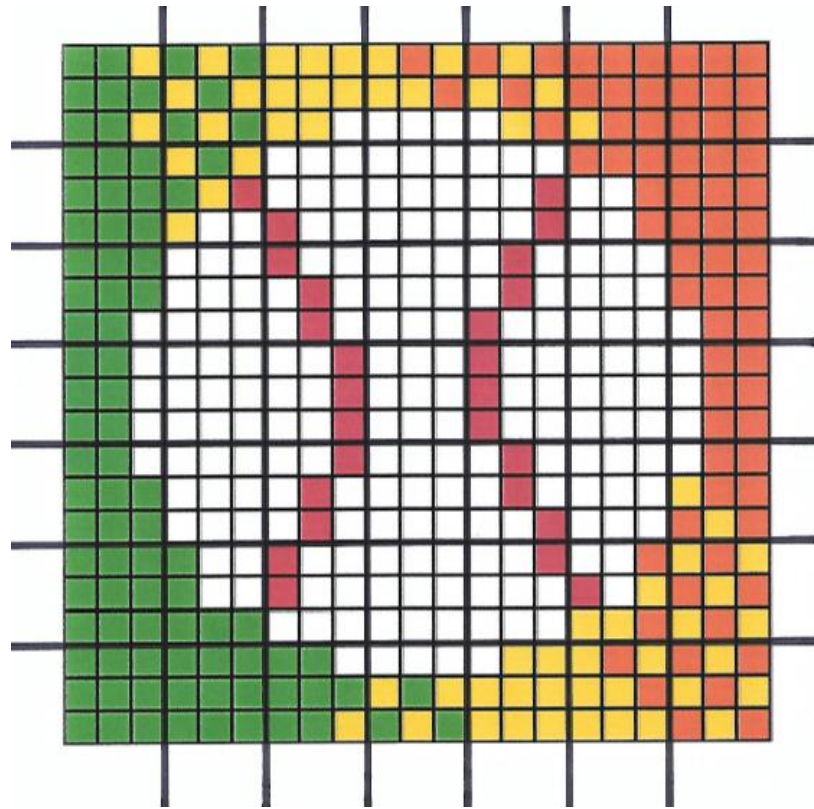
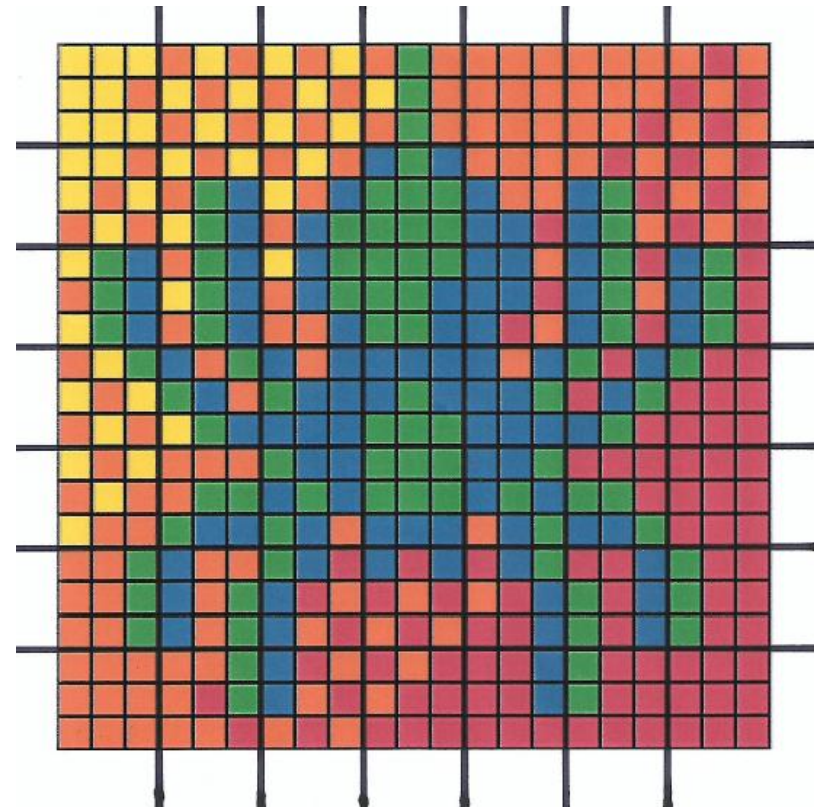
Rubik's Cube Mosaics at MAA MathFest 2025



Designs that Lauren Rose Sent Me



Designs that Lauren Rose Sent Me



Welcome to Panama!



Panama

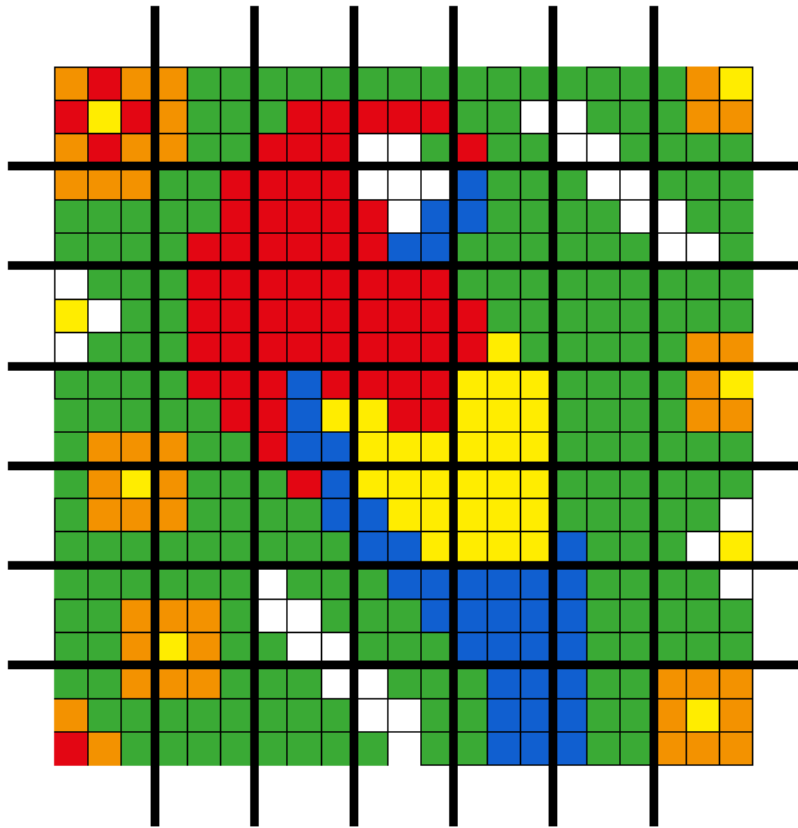


maphill

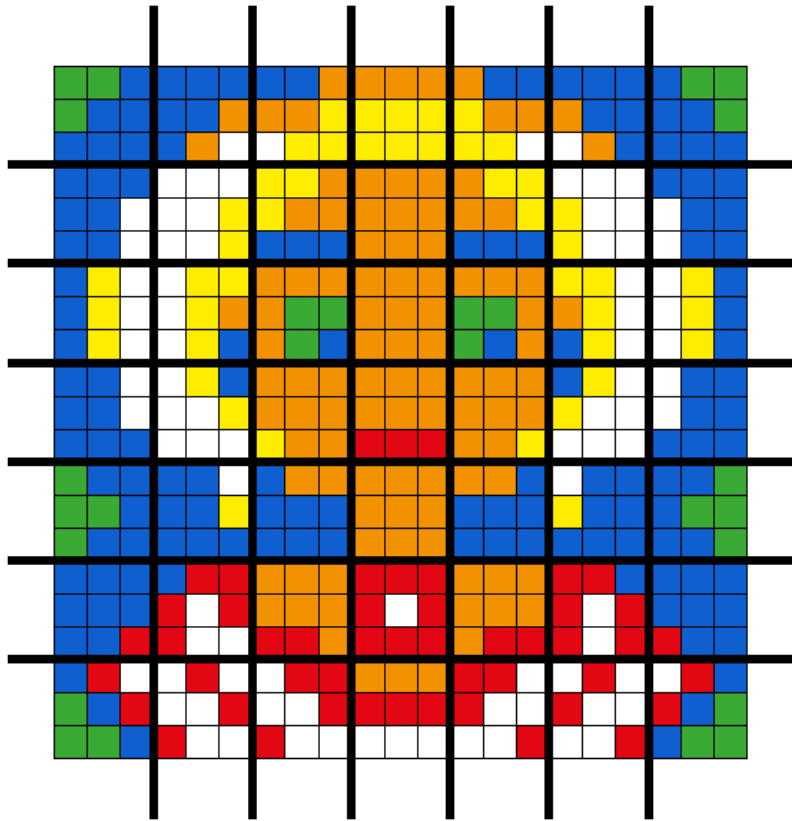
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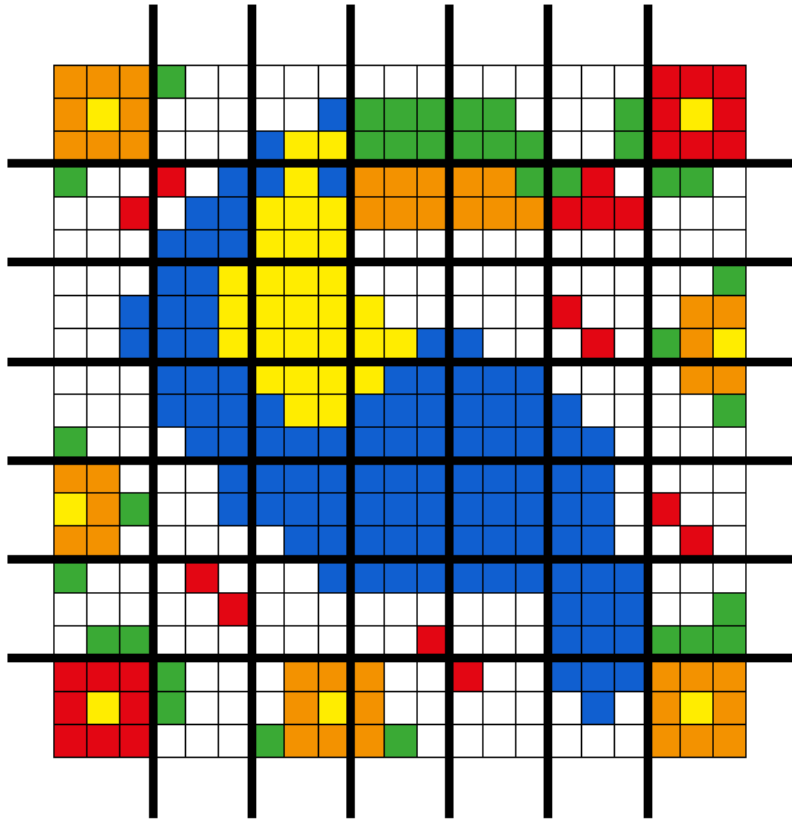
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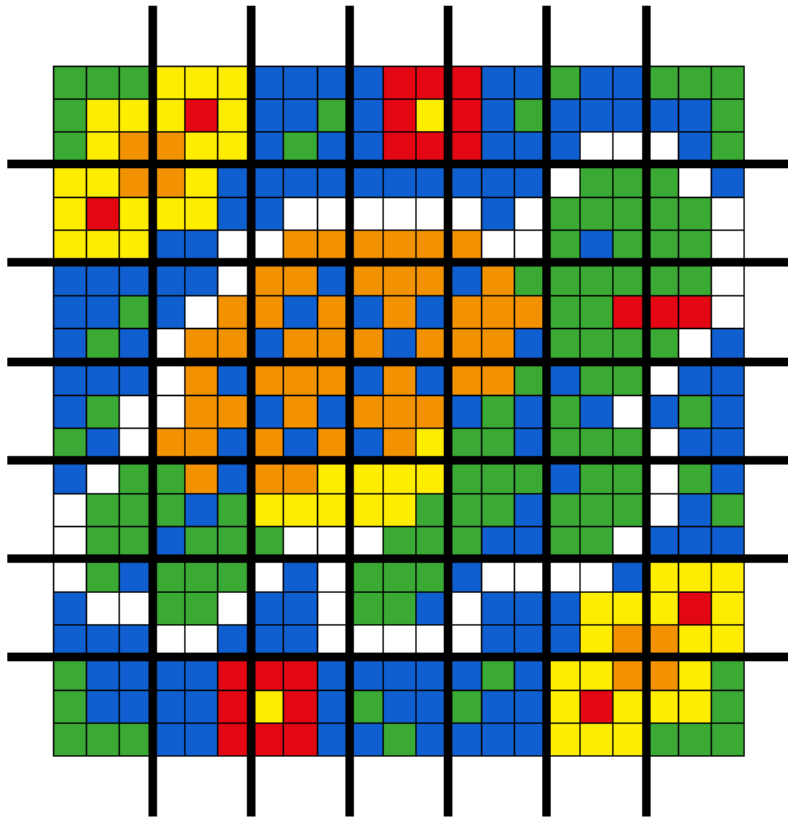
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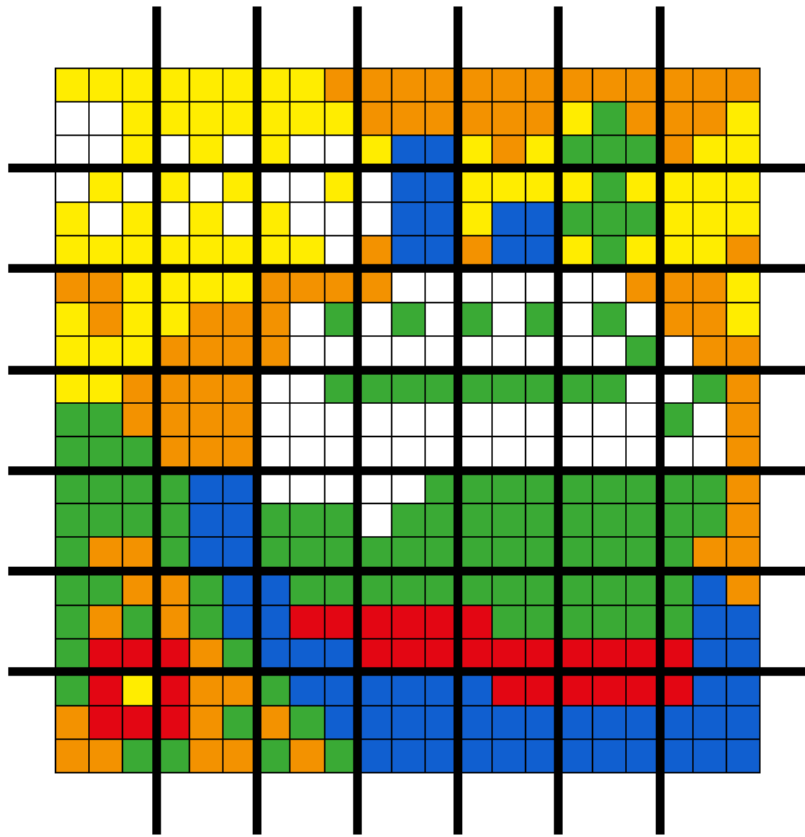
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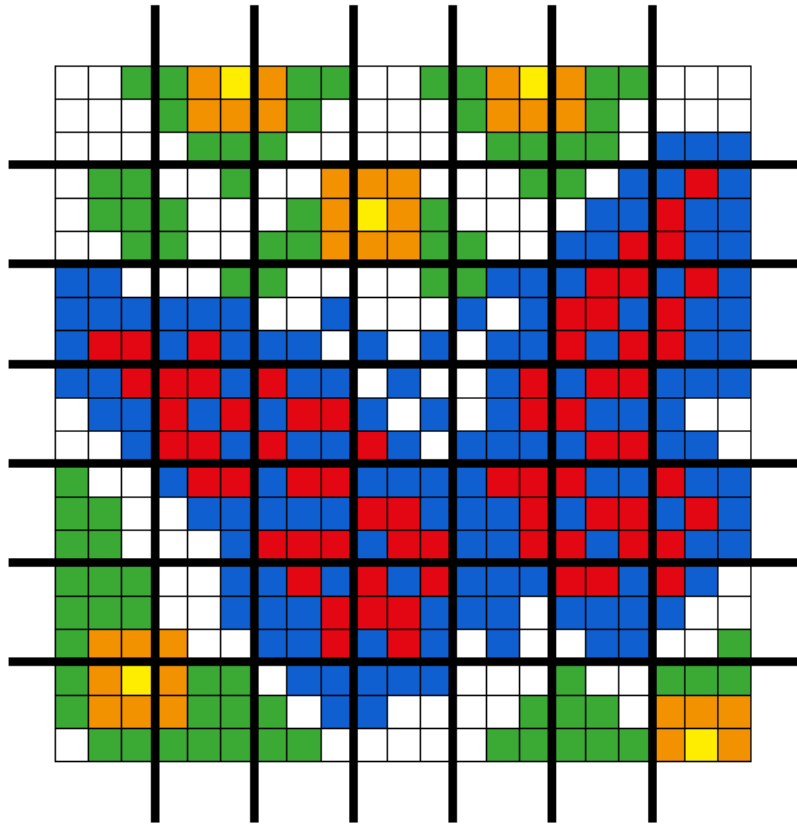
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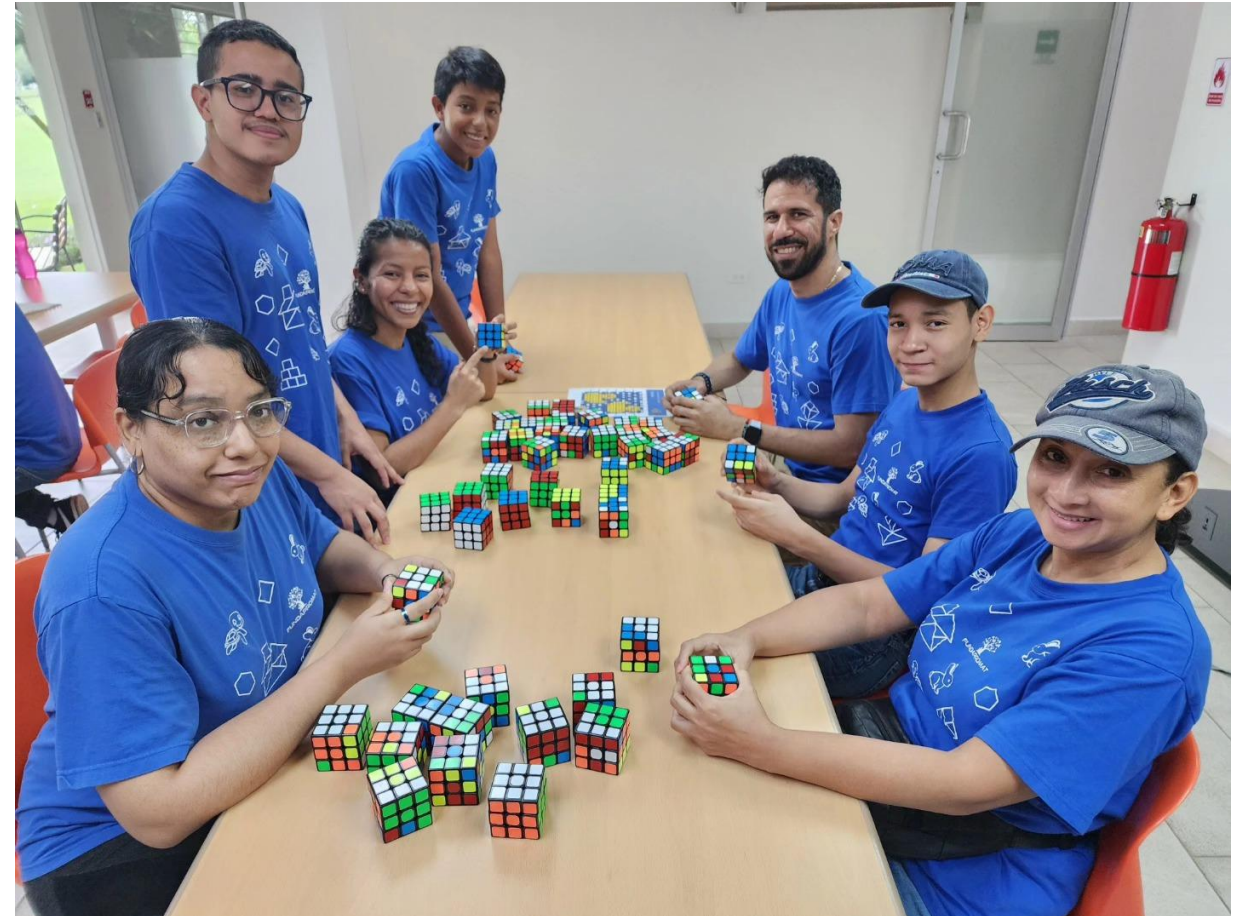
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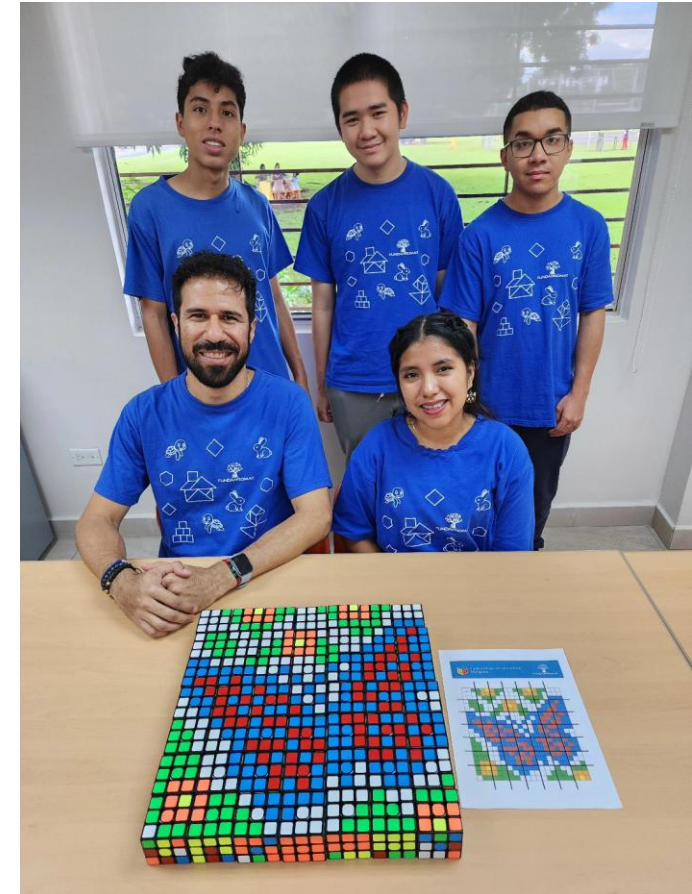
FUNDAPROMAT Volunteer Encounter



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What We Learned & Future Plans



- ▶ **SO MUCH FUN** designing new Rubik's Cube Mosaics
- ▶ Restrictions:
 - ▶ No black
 - ▶ Only 49 Rubik's Cubes, that is a 7x7 grid
- ▶ In 2026 we plan to launch a FUNDAPROMAT competition inviting Panamanians to design their own mosaics
- ▶ Cube Mosaic Generator:
<https://rubikscubemosaic.com>

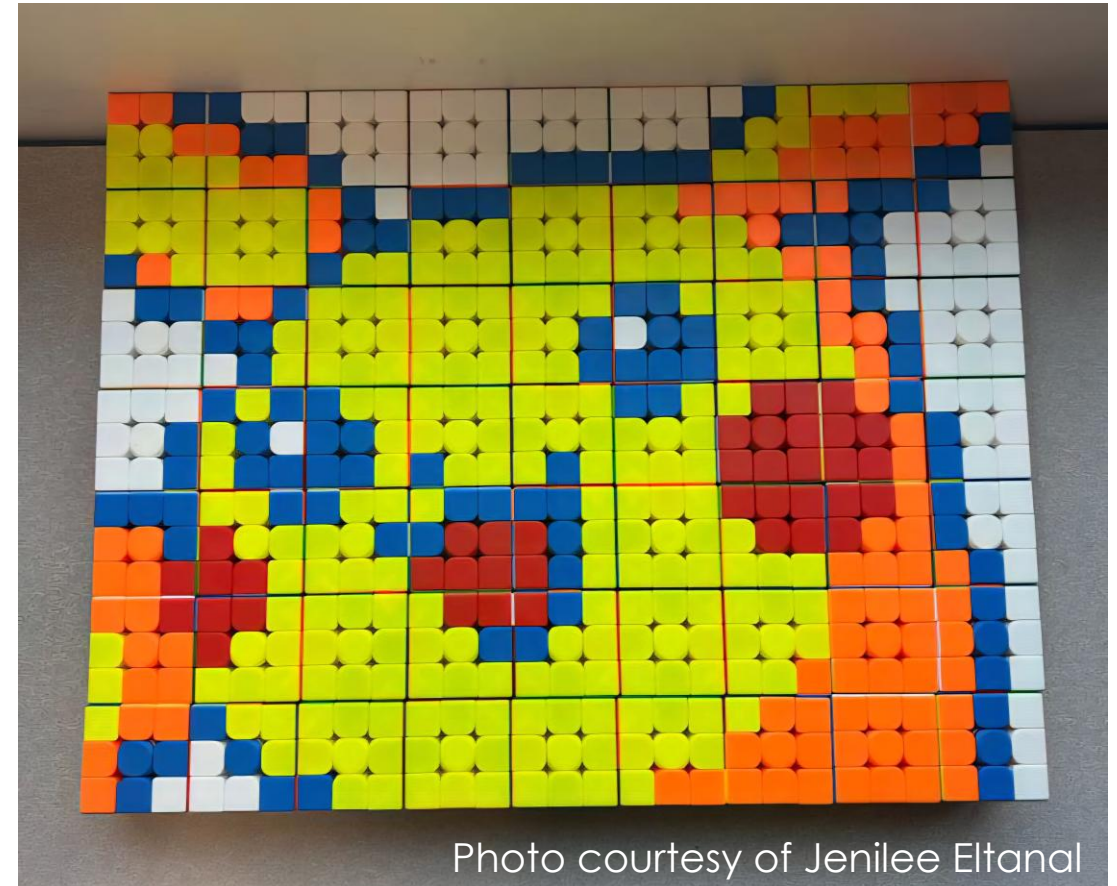
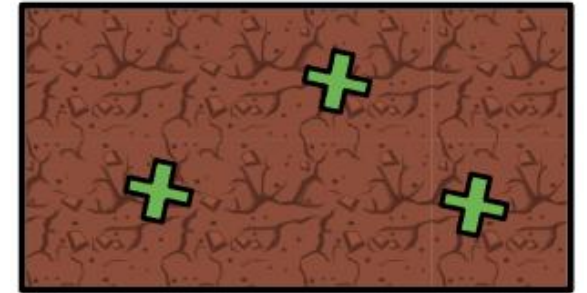


Photo courtesy of Jenilee Eltanal

Other Fun Puzzles: Brussels Sprouts



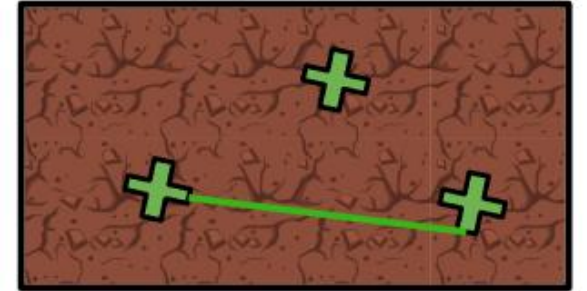
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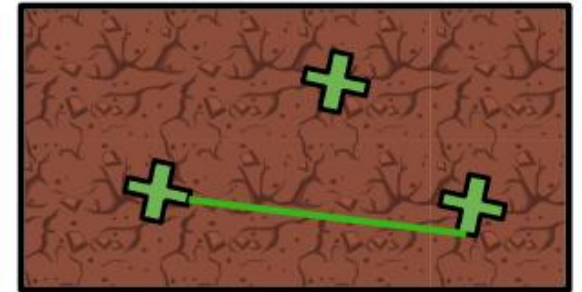
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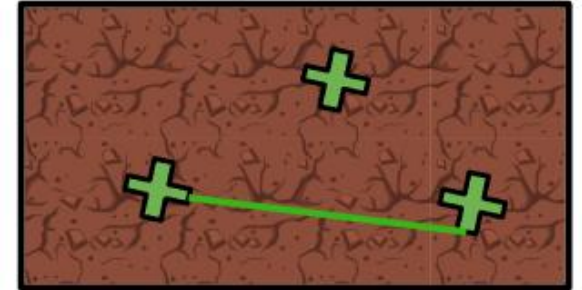
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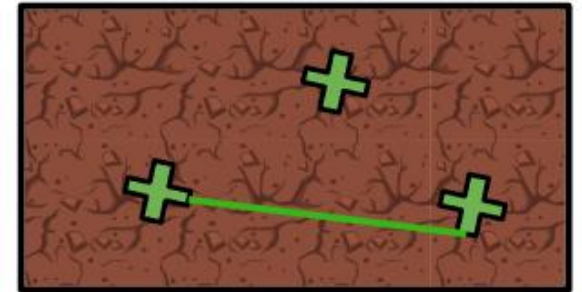
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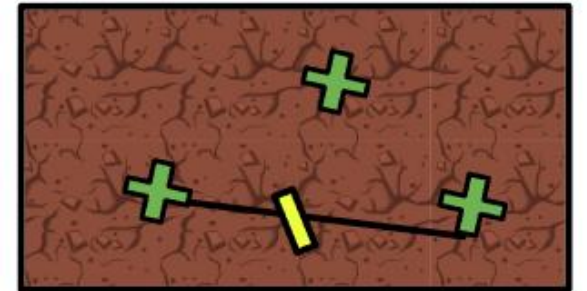
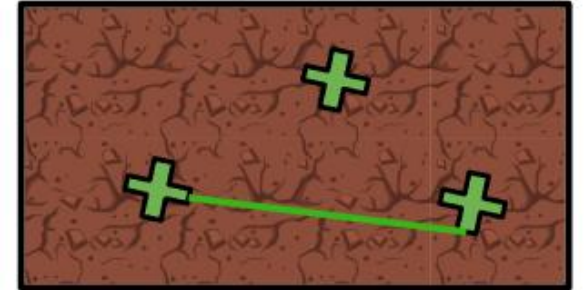


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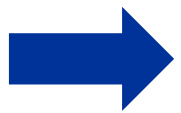
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Is there a winning strategy?



Free Resources

- ▶ **Factorial Magazine**
- ▶ Virtual Escape Room
- ▶ Scavenger Hunt
- ▶ Math Gallery
- ▶ Student Creations
- ▶ Teaching Resources – *MANY MORE* fun puzzles



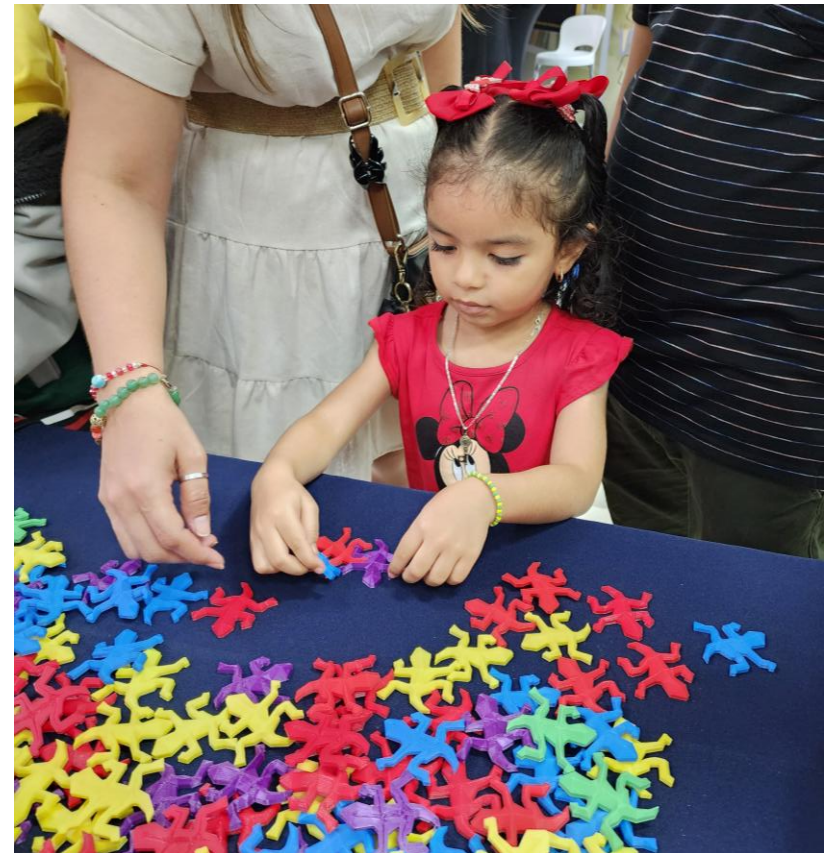
Website: fundapromat.org/en



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- Volunteer to become a speaker for an upcoming webinar



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- Help us promote our free events



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Thank you!

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