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SHORTS, HOOKS, & INQUIRY

MIDDLE LEVEL MATHEMATICS

DR. MIKE SHERMAN

drmikesherman msherman@bhusd.org

October 27, 2023

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Shorts: Visual Patterns I

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Shorts: Visual Patterns II

Page 6: Booklet

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Shorts, Hooks, Premiers!

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HOOKS

Visual Patterns

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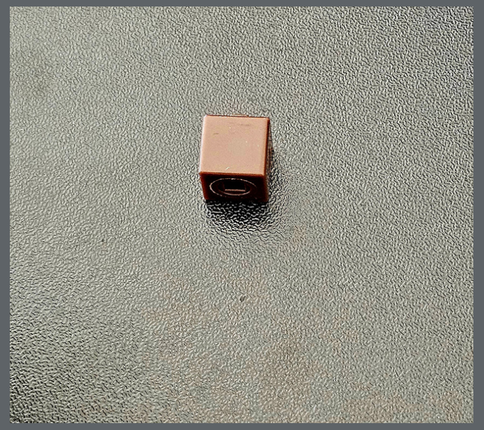

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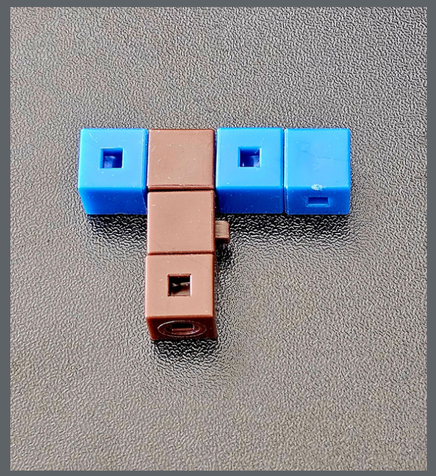

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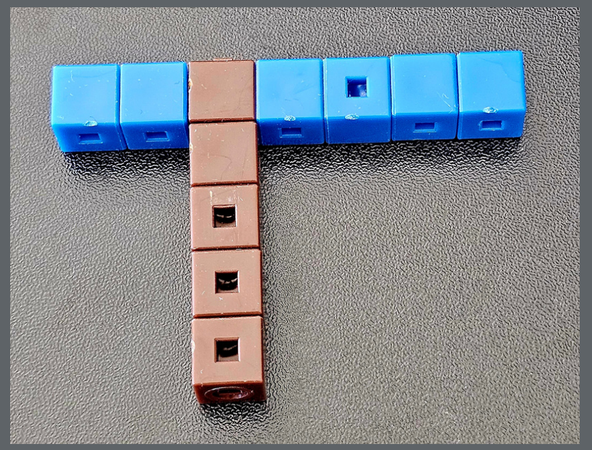

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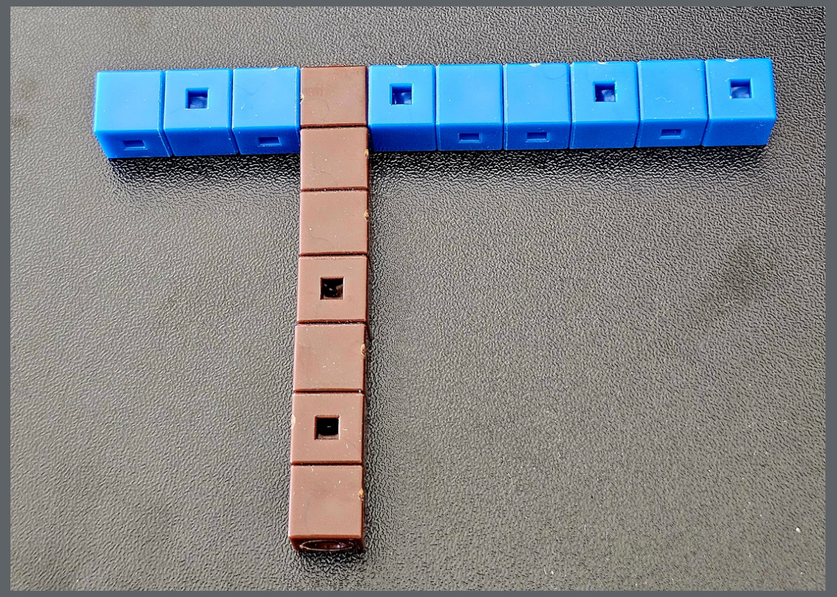

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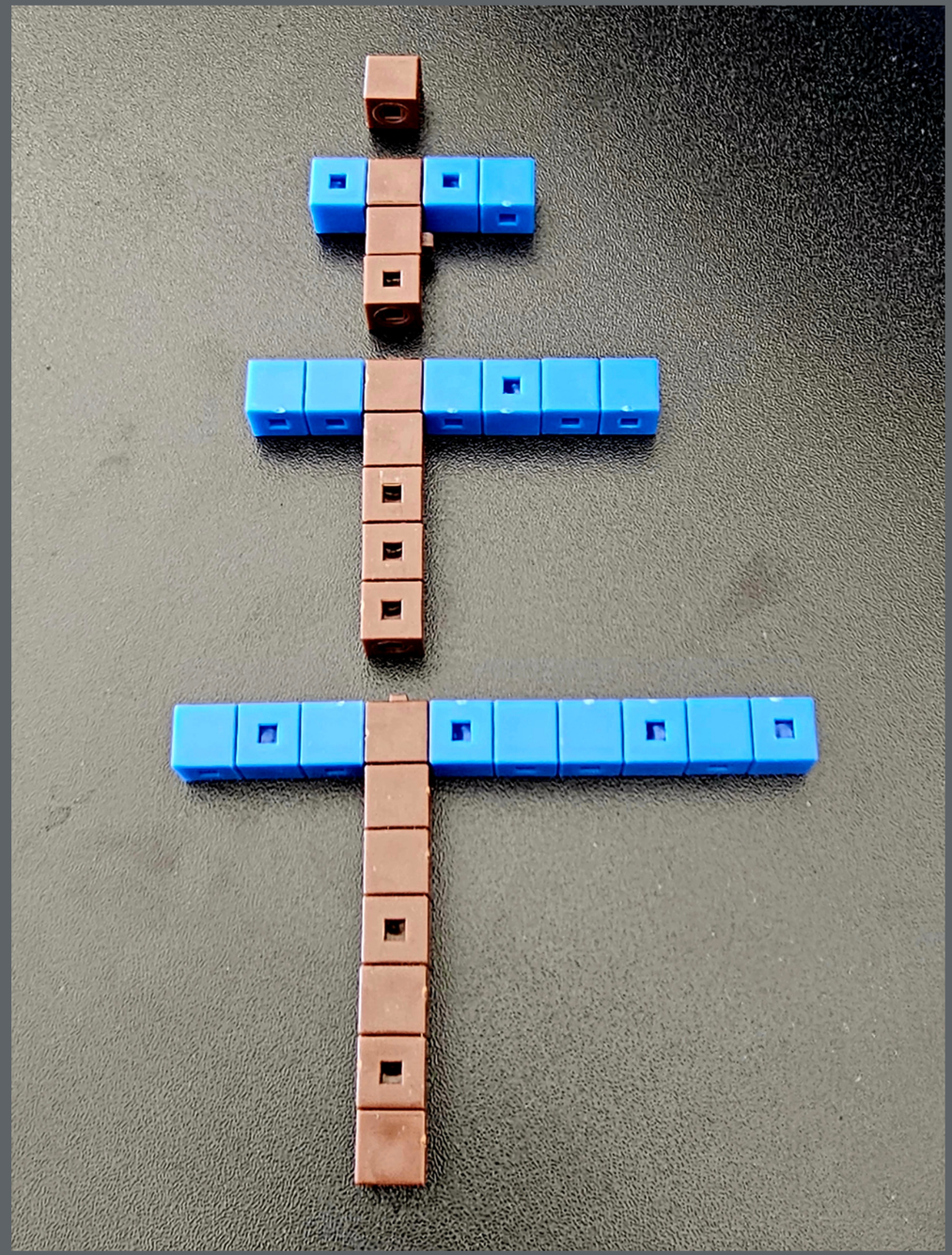

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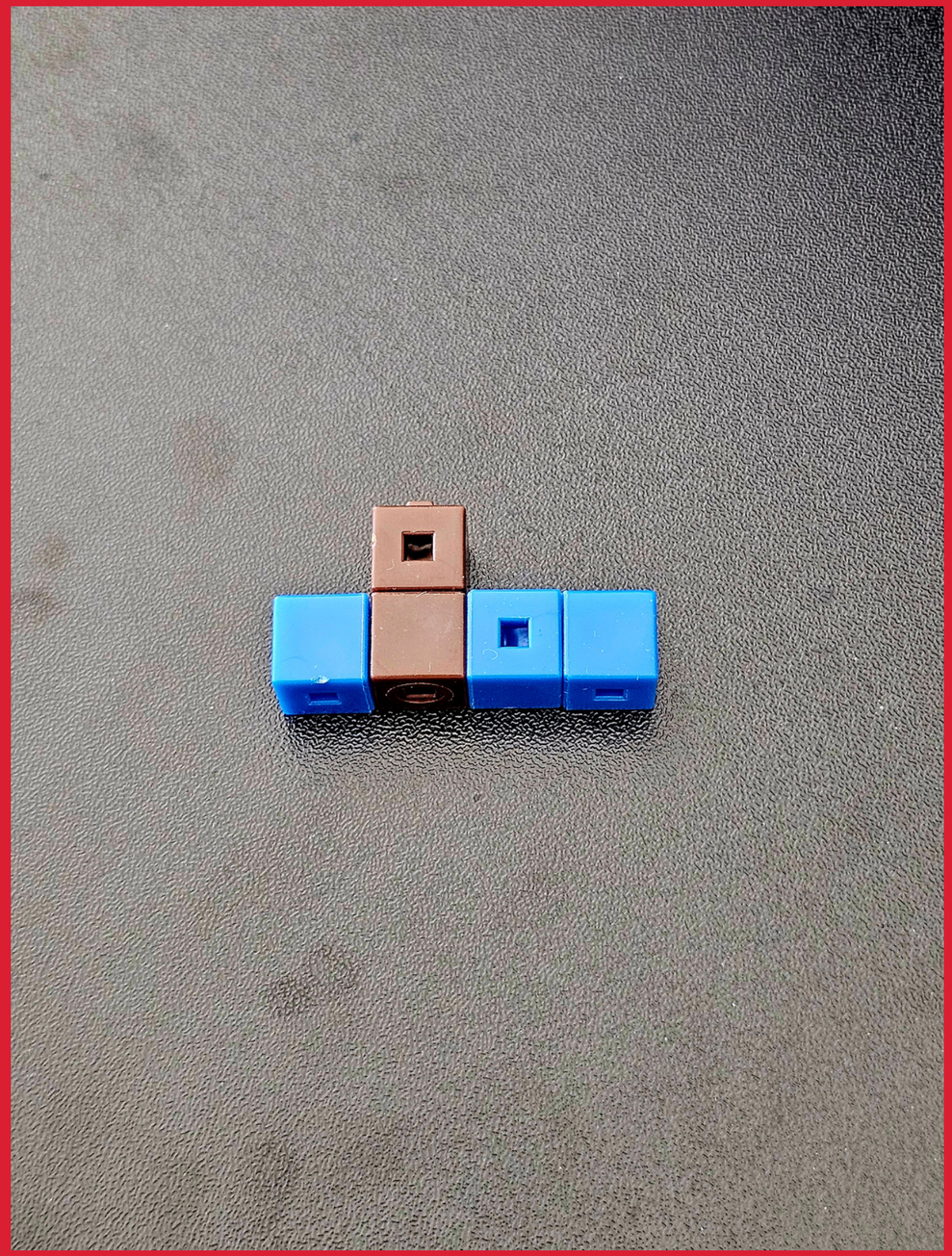

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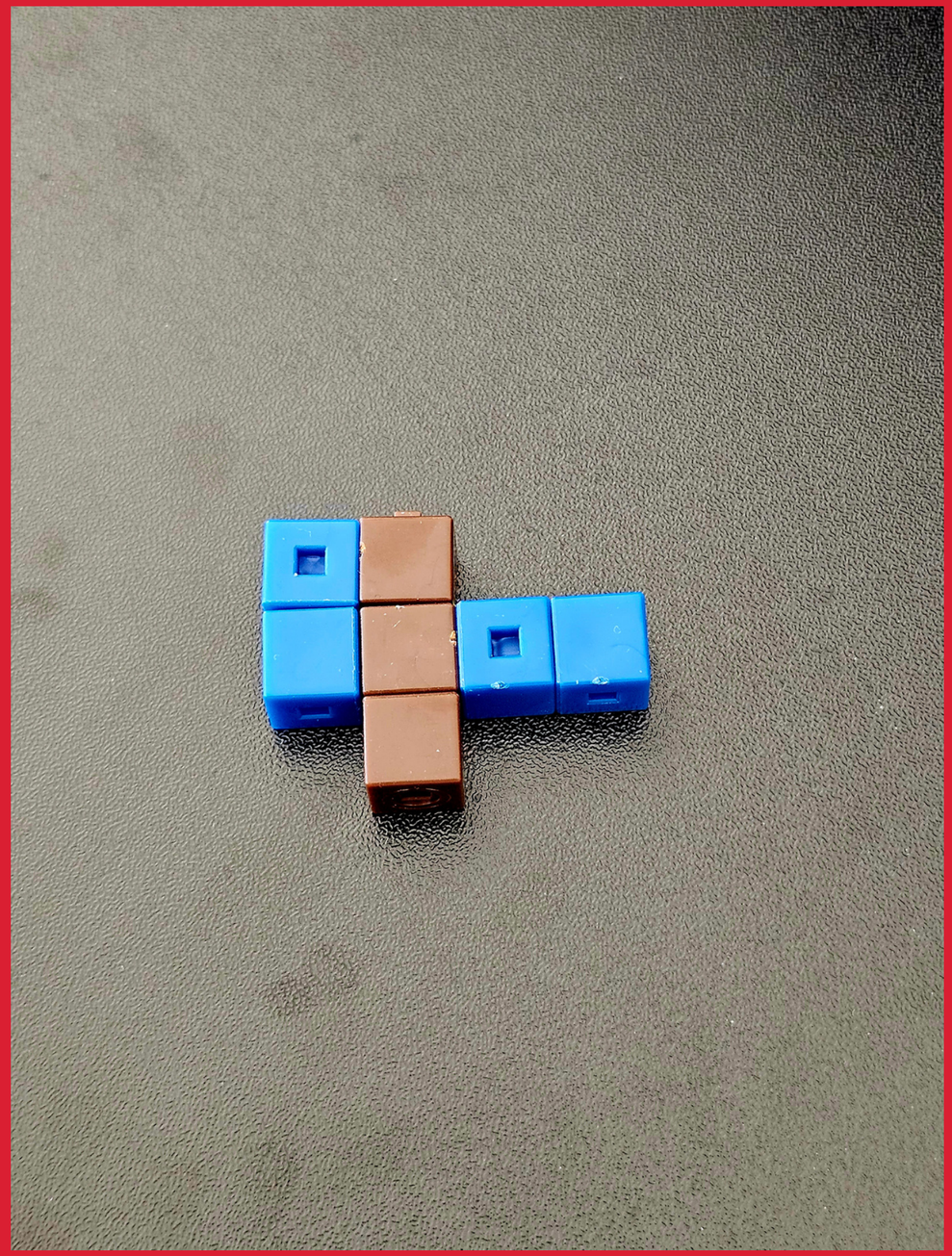

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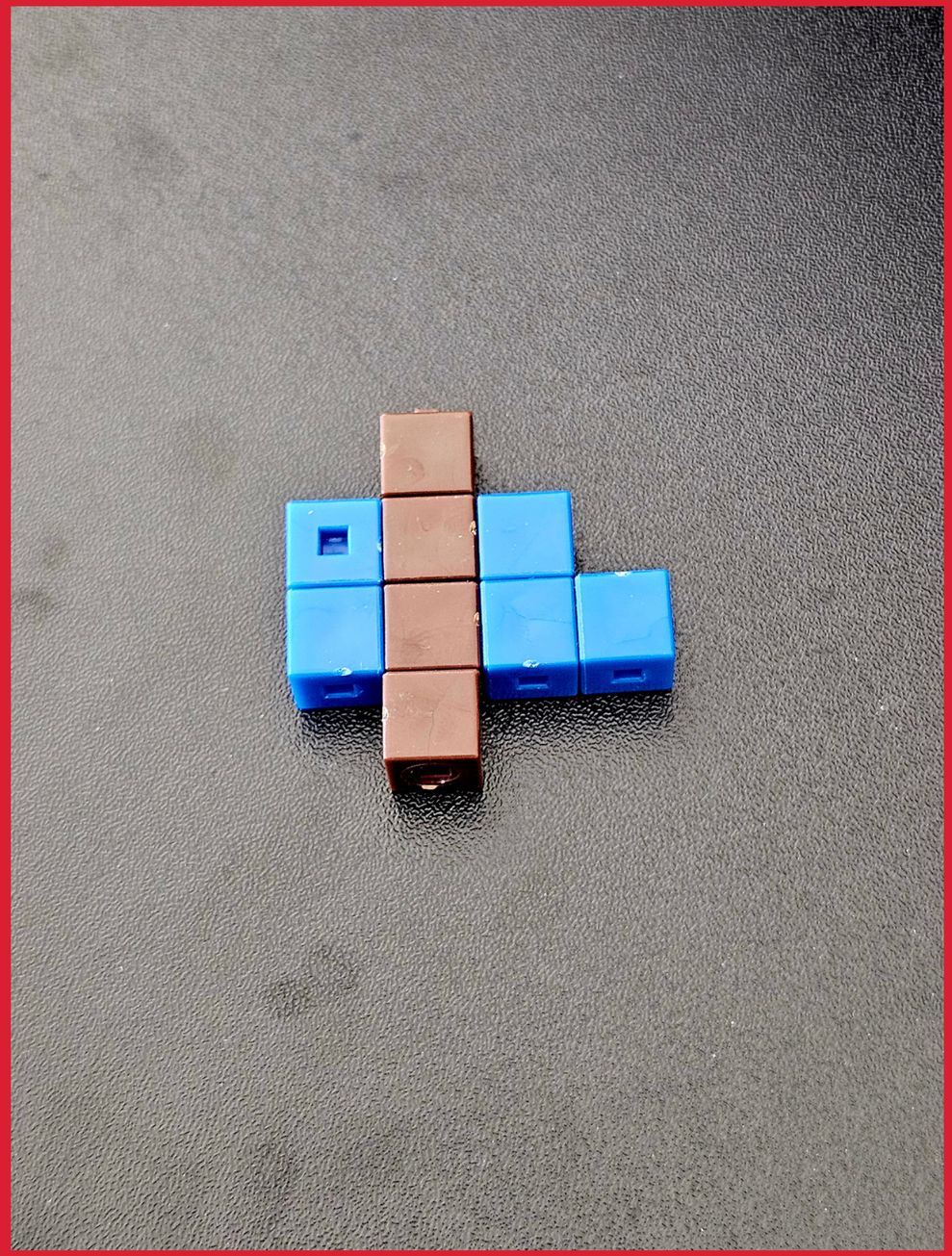

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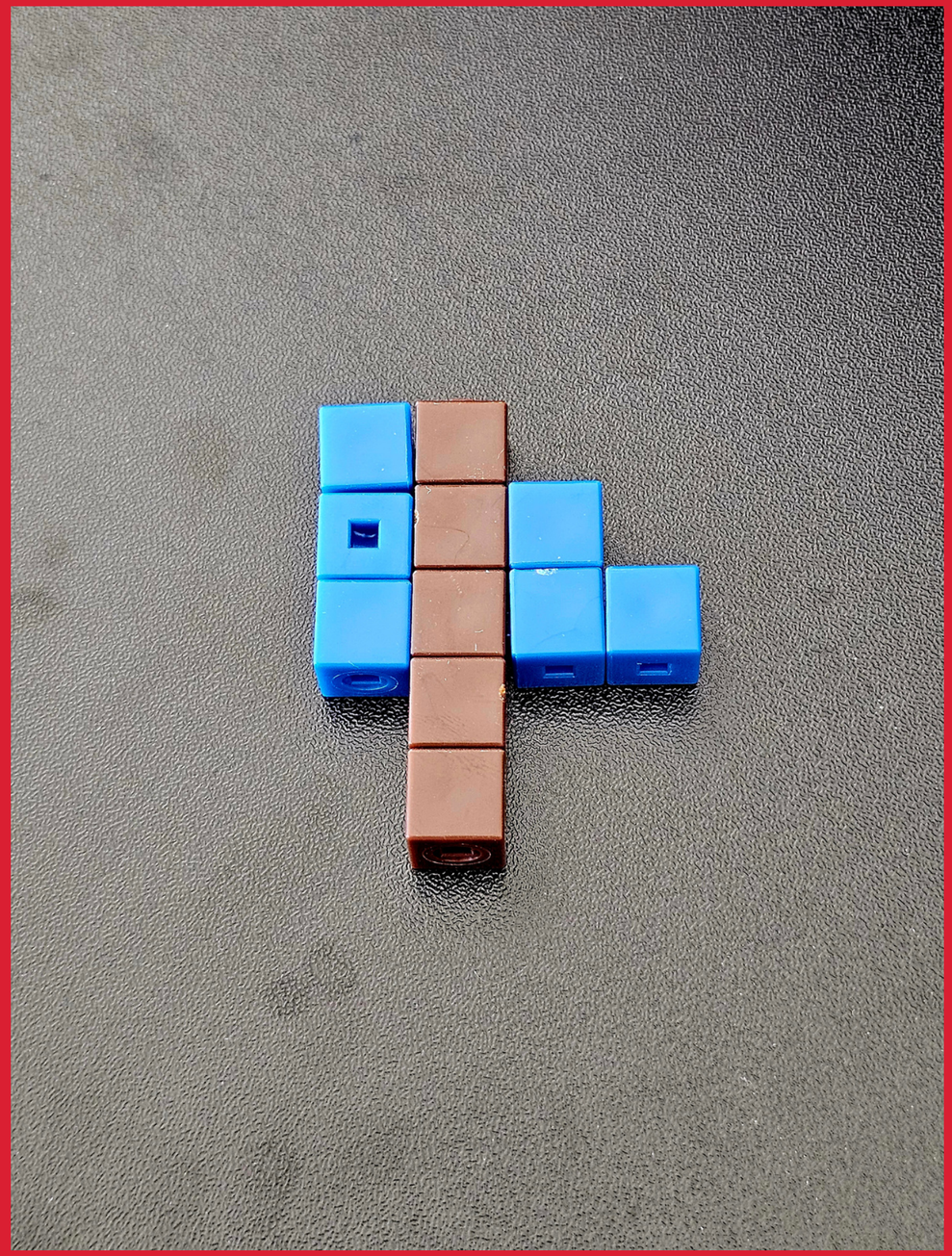

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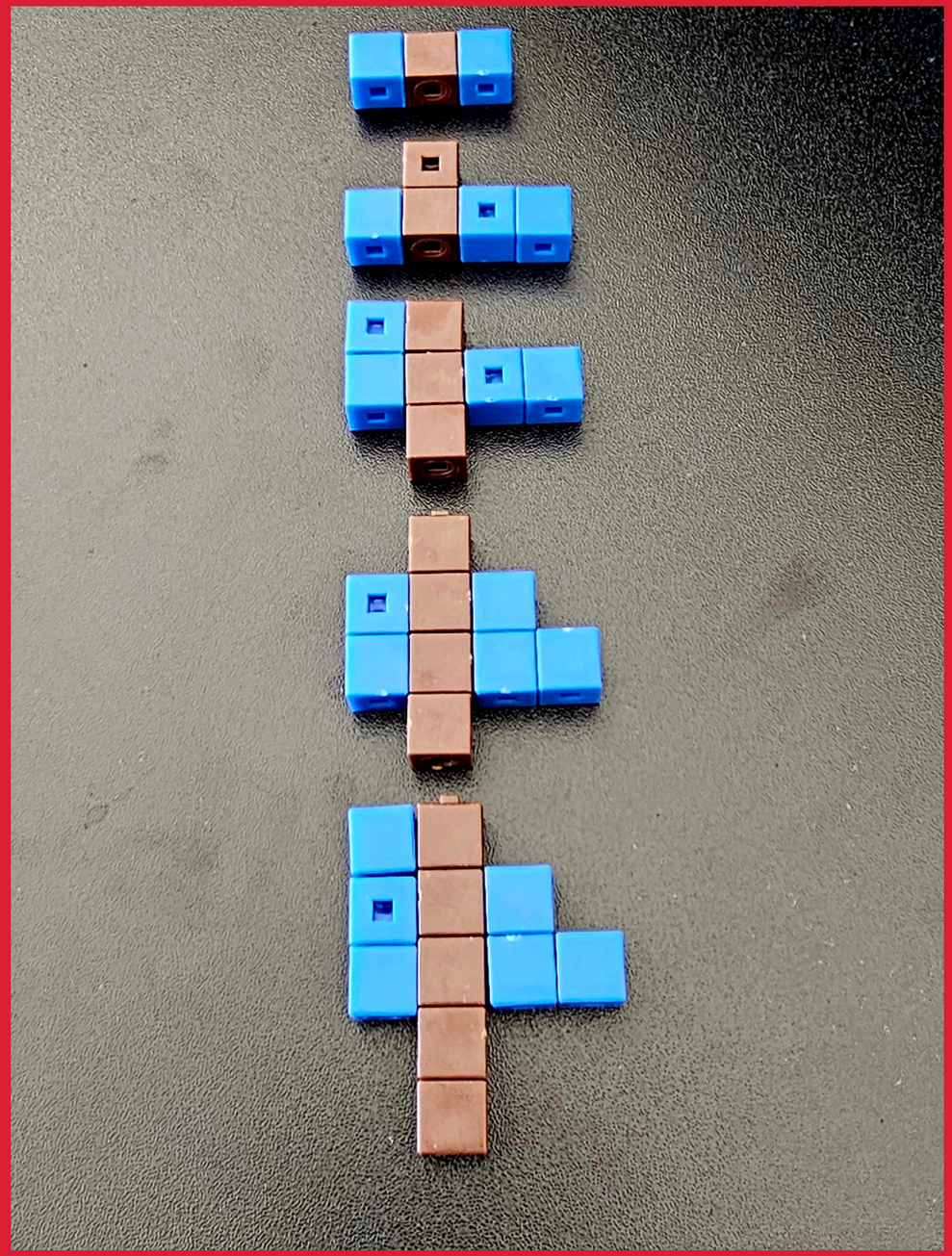

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Construct your own visual pattern.

Challenge your classmates to discover your rule.

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HOOKS

Pythagorean Theorem

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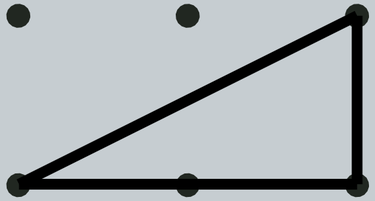

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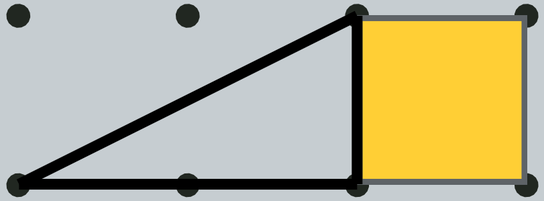

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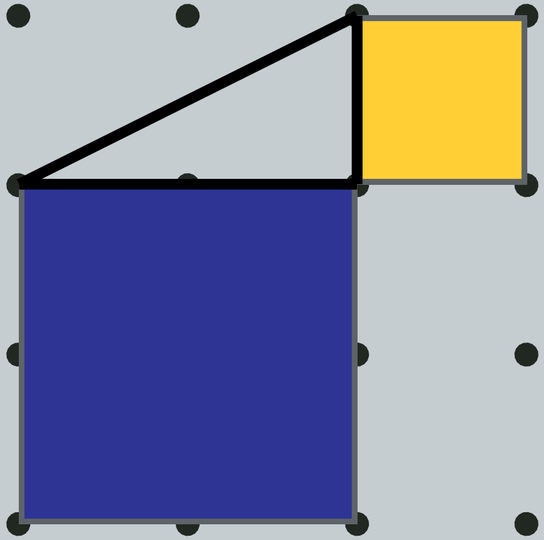

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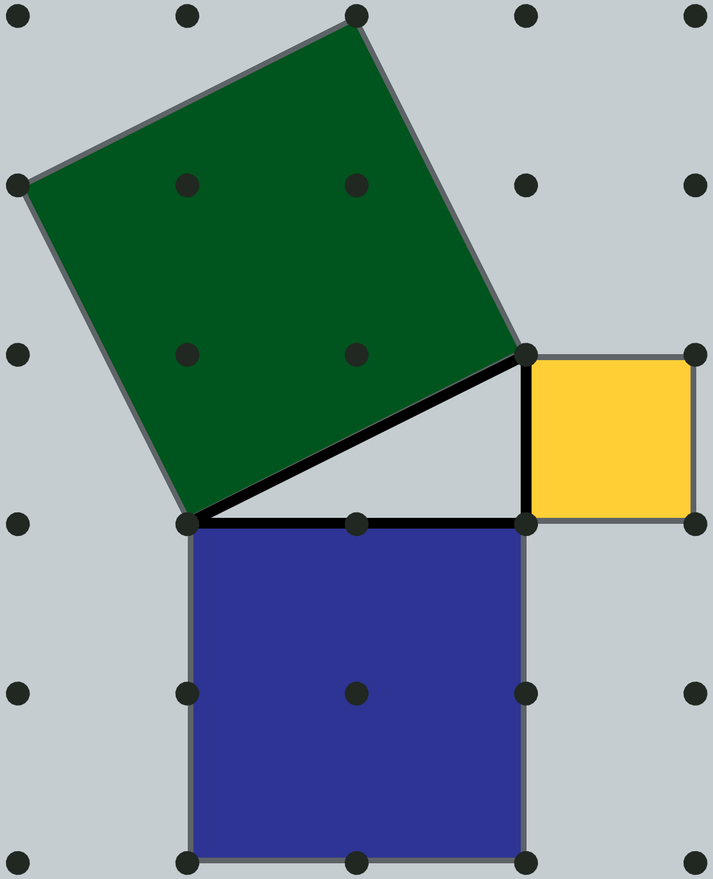

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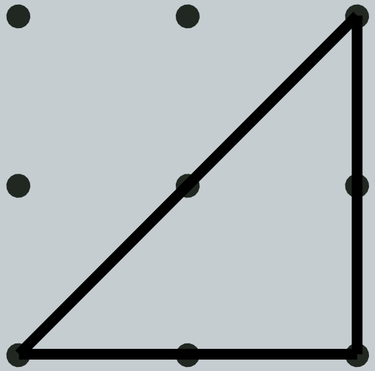

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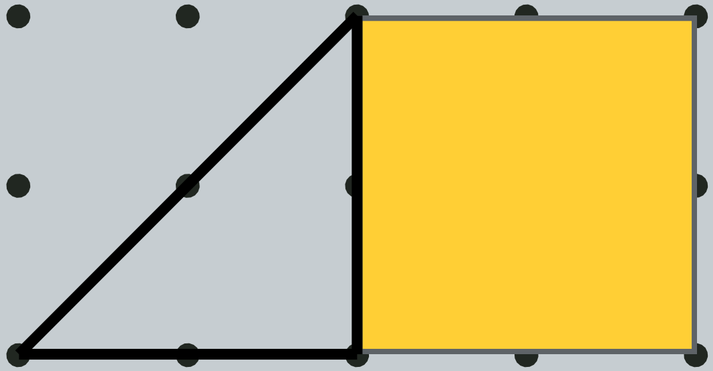

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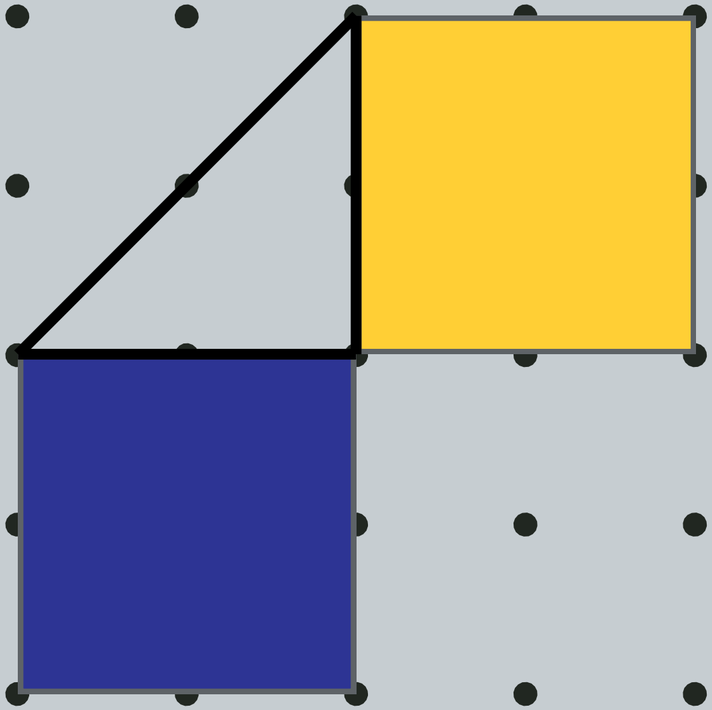

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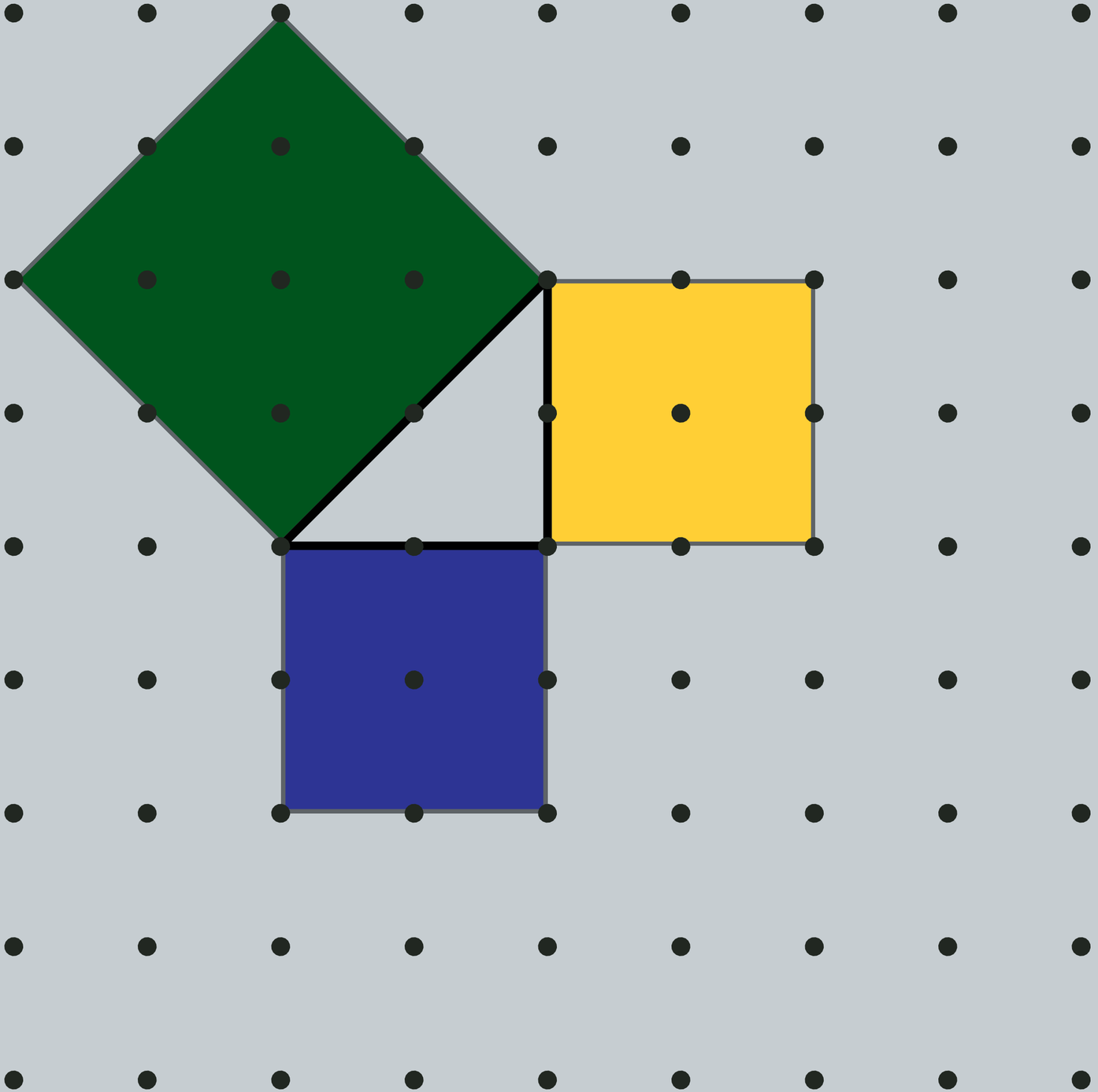

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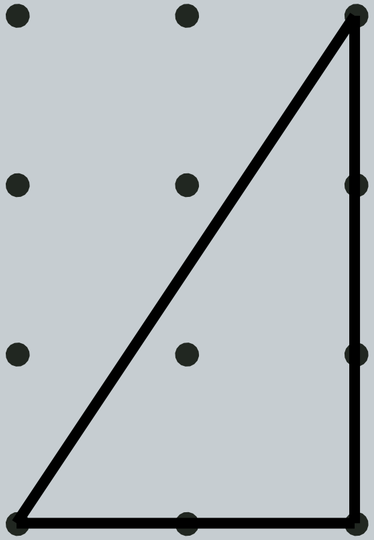

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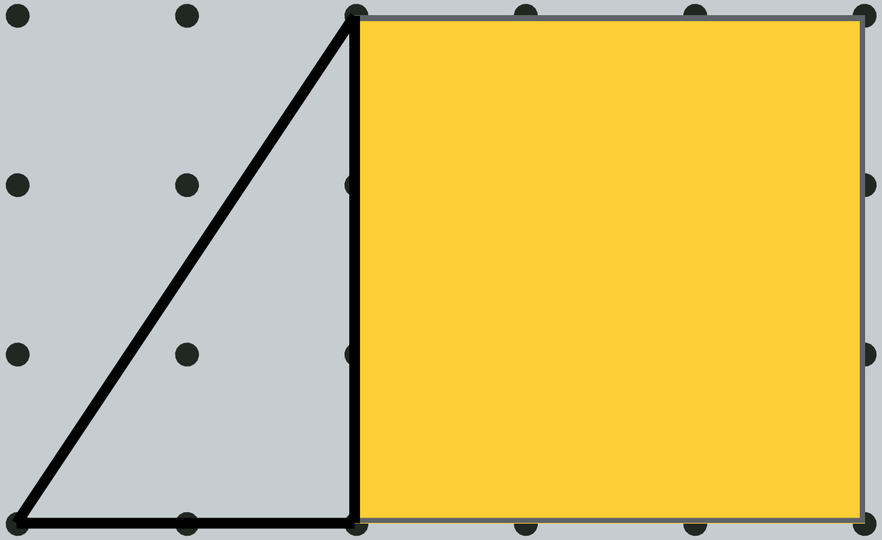

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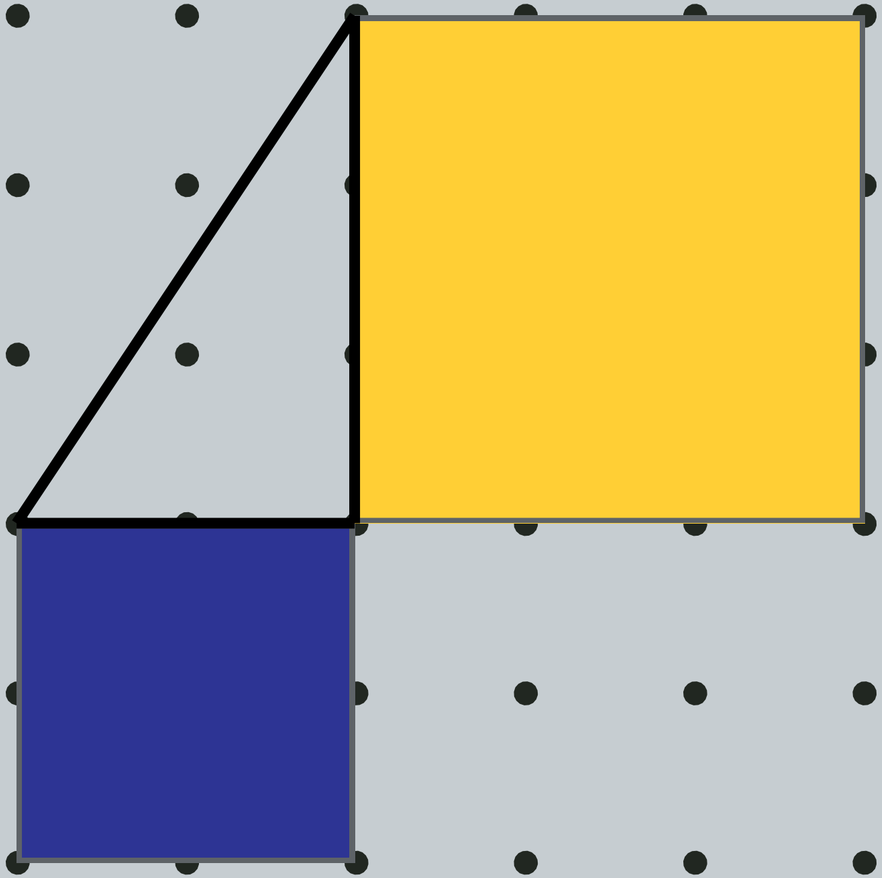

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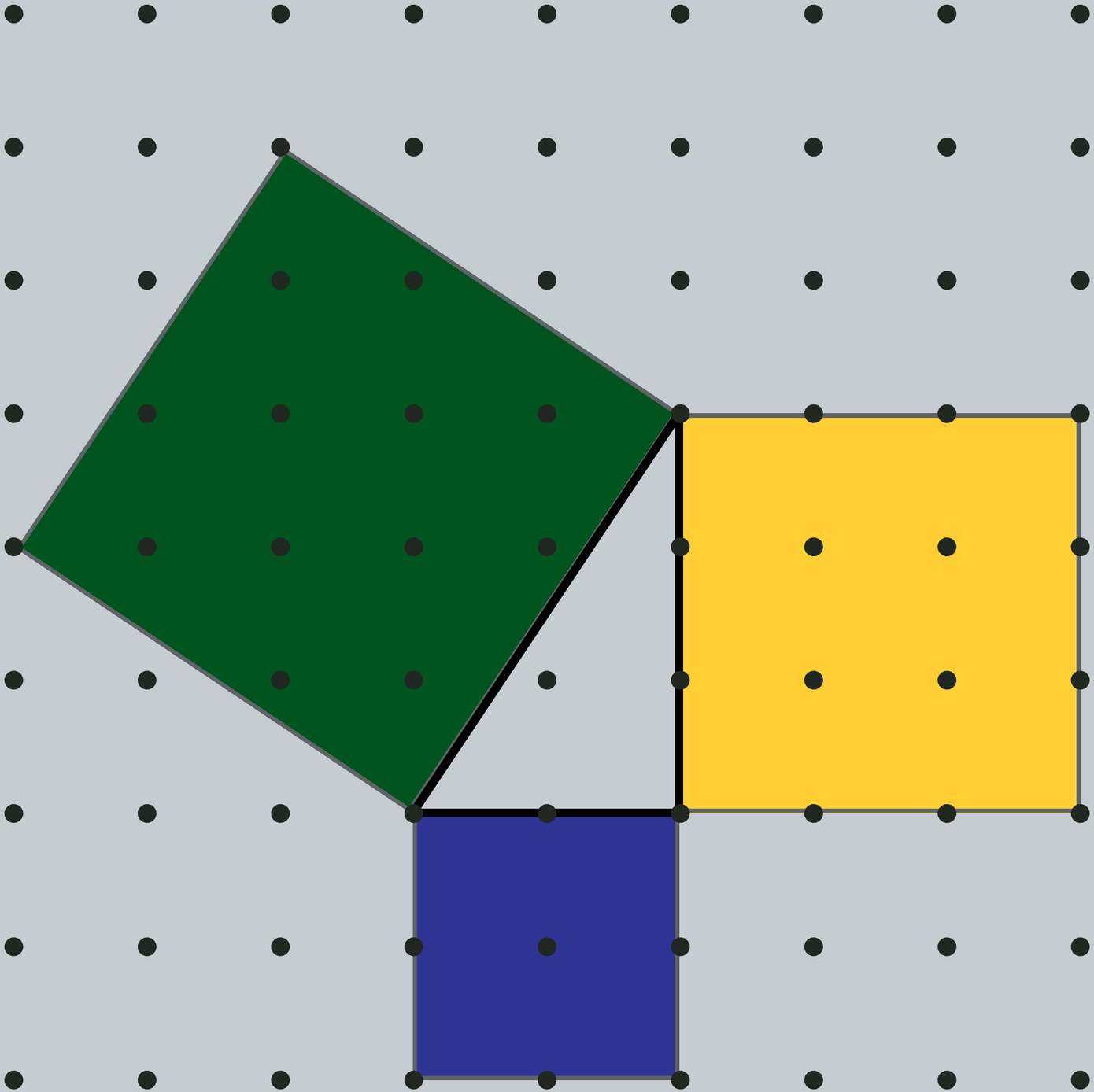

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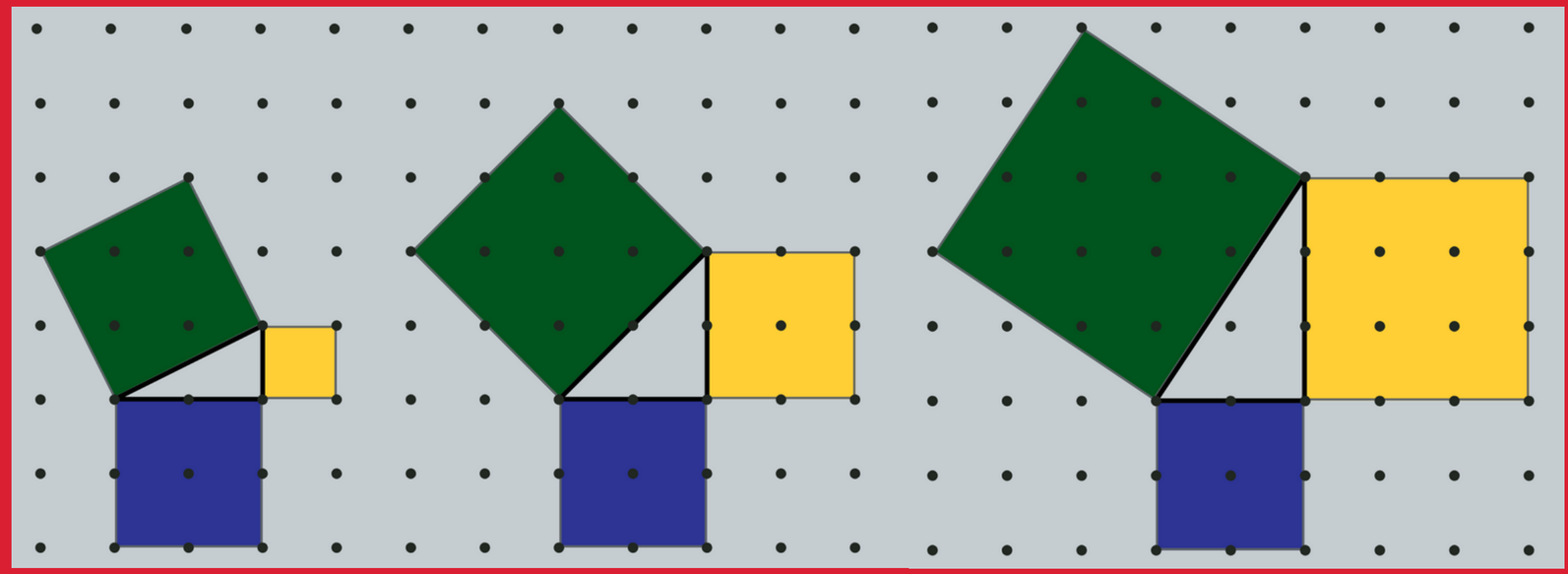

What do you notice?

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What's Missing?

Leg 1 Length (units)	Leg 2 Length (units)	Area of Leg 1 Square (square units)	Area of Leg 2 Square (square units)	Area of Hypotenuse Square (square units)
1	1			
1	2			
2	2			
	1			17
	2			20
				10
				25
4				32
6				100
				37
12				169
a	b			

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Exponential Hook

Congratulations, you've been chosen for the deal of a lifetime! You have two options to choose from.

Option 1: During the month of July, you will receive $1 on July 1st and then you will receive double what you received the previous day for every remaining day that month.

Option 2: During the month of July, you will receive $1,000,000 each day of the month!

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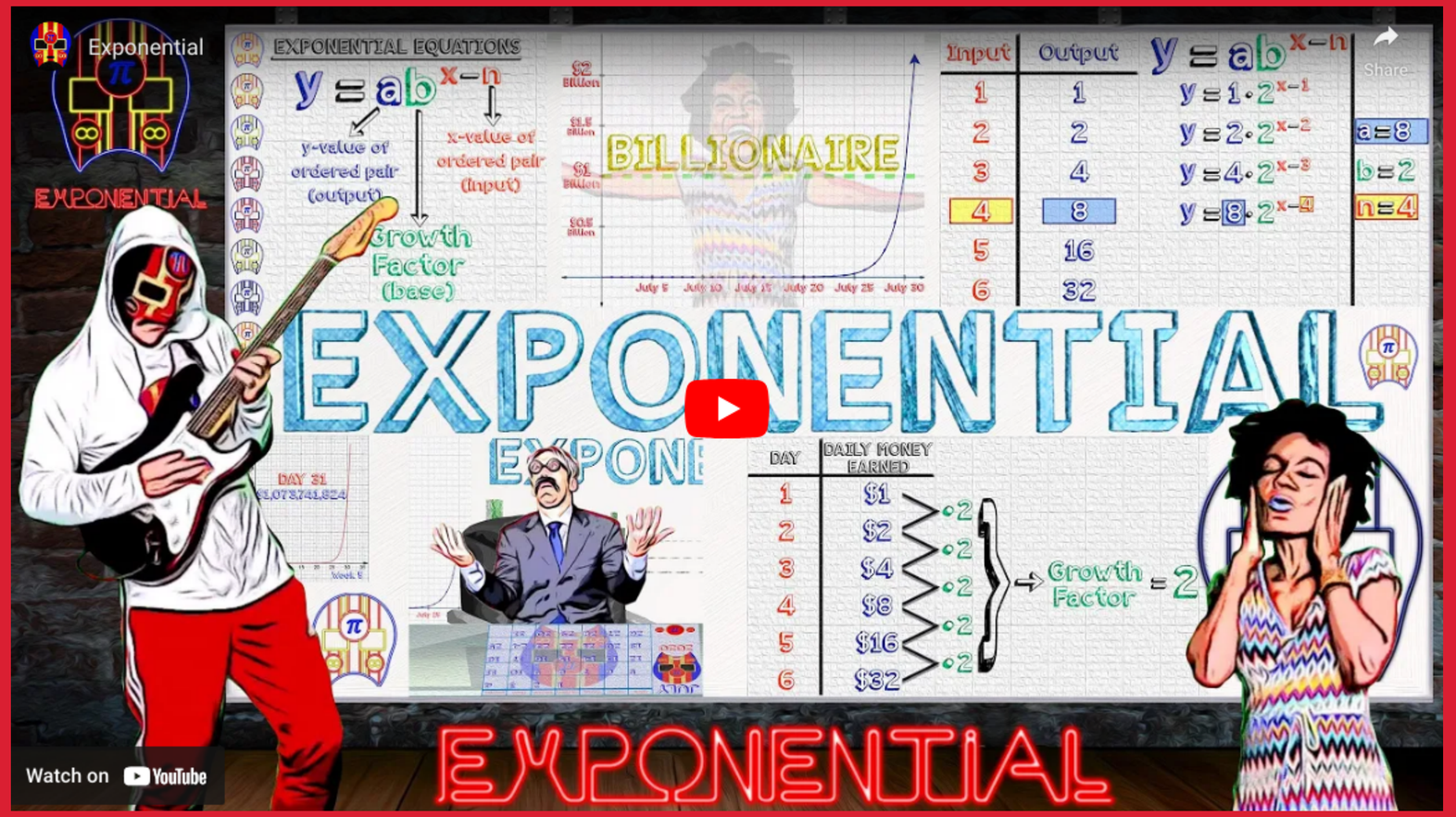

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Why did you make your original choice?

Were you surprised by how much money Paty made? Why?

How was the growth in money different to what you have previously studied? How was it similar?

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