

Pattern Block Activities



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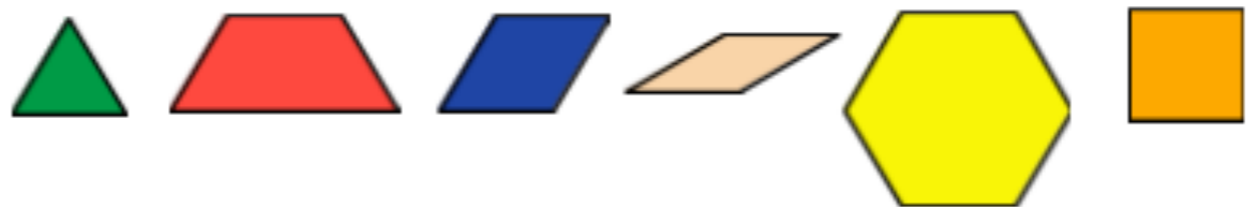
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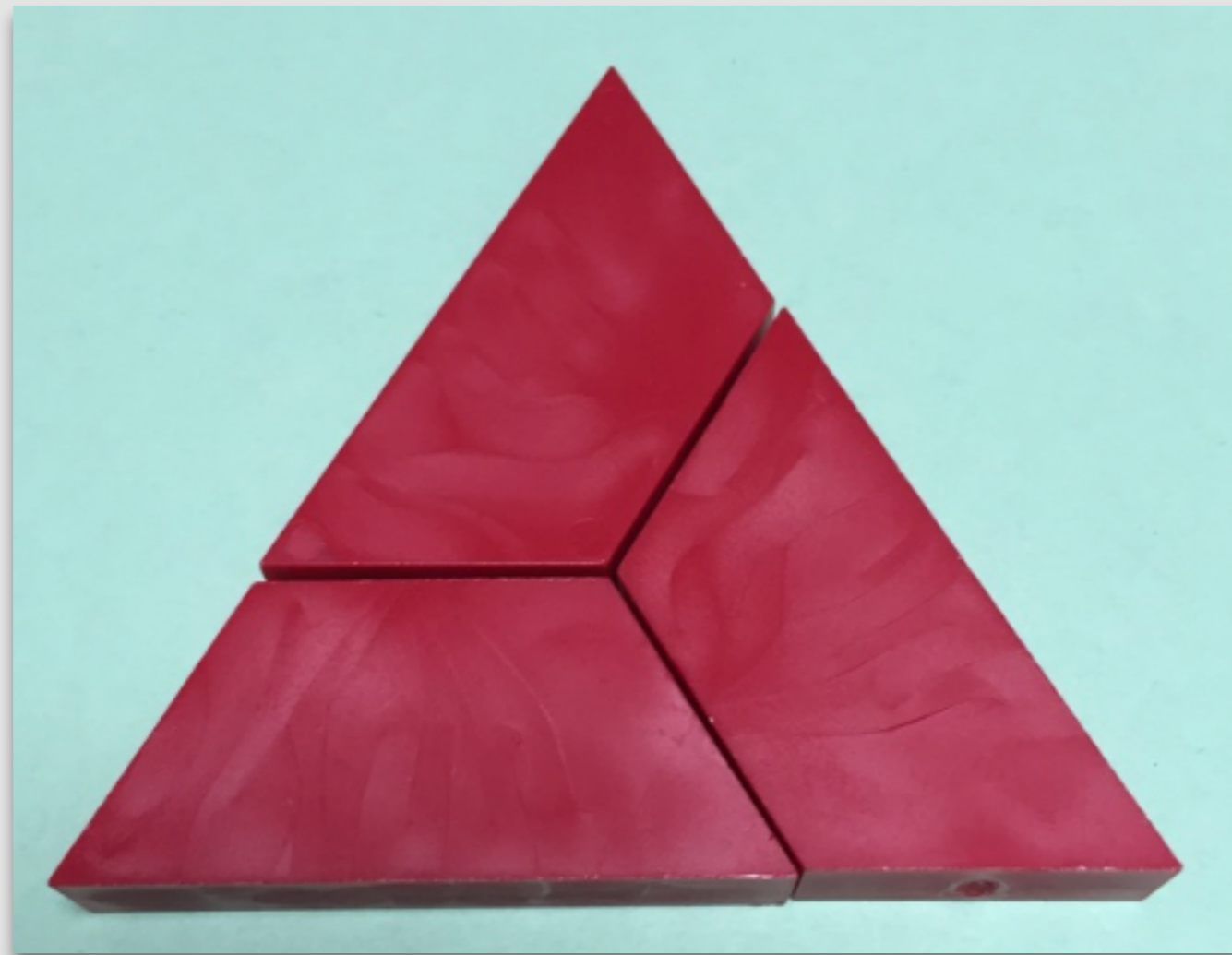
Meet the pattern blocks

1. Make a red triangle.
2. The side lengths are all 1 inch (except the long side of the trapezoid, which is 2.) What is the area of the tan block?

How many sides?

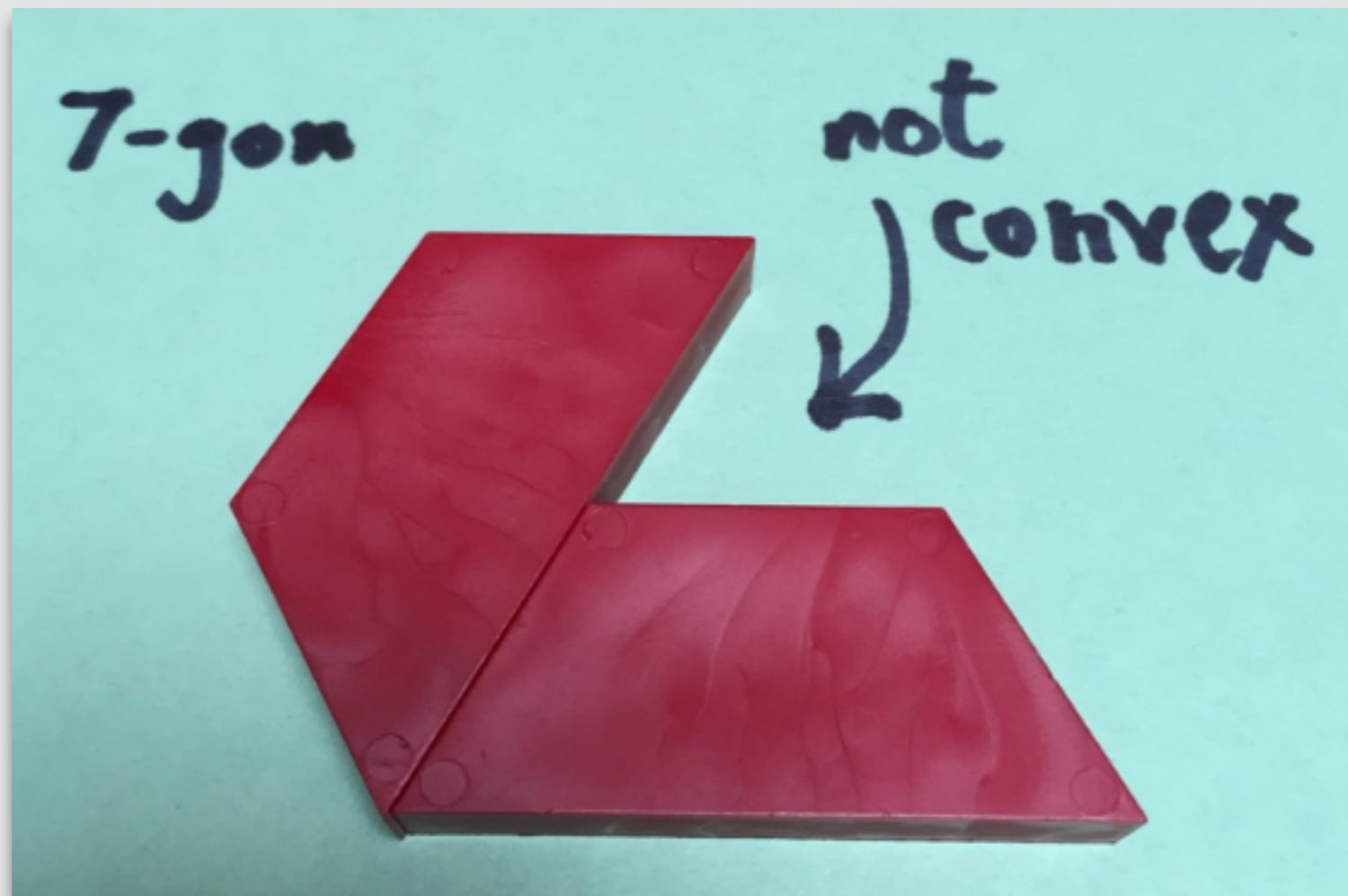
vs.

What is the perimeter?



Make convex n-gons, with all different n's

(convex n-gon: every interior angle is $< 180^\circ$)



3



4



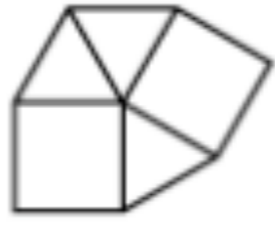
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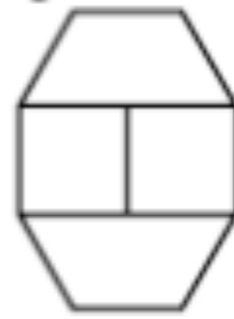
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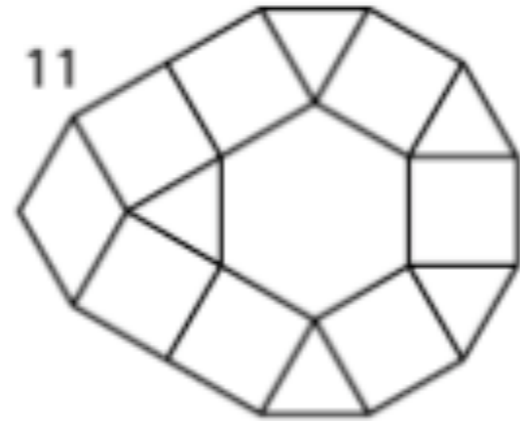
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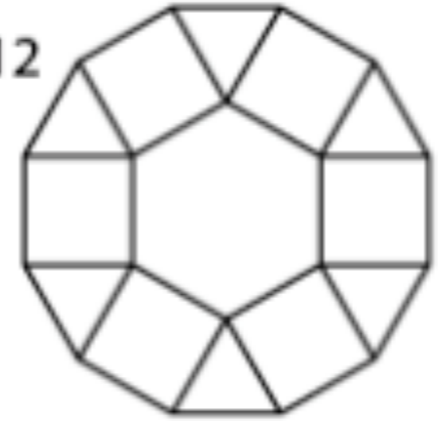
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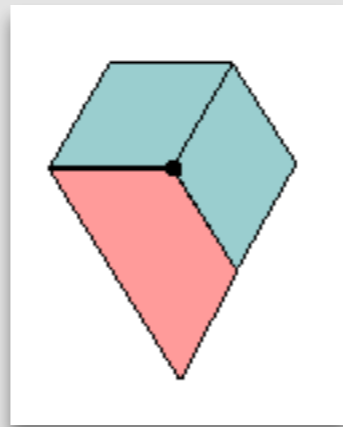


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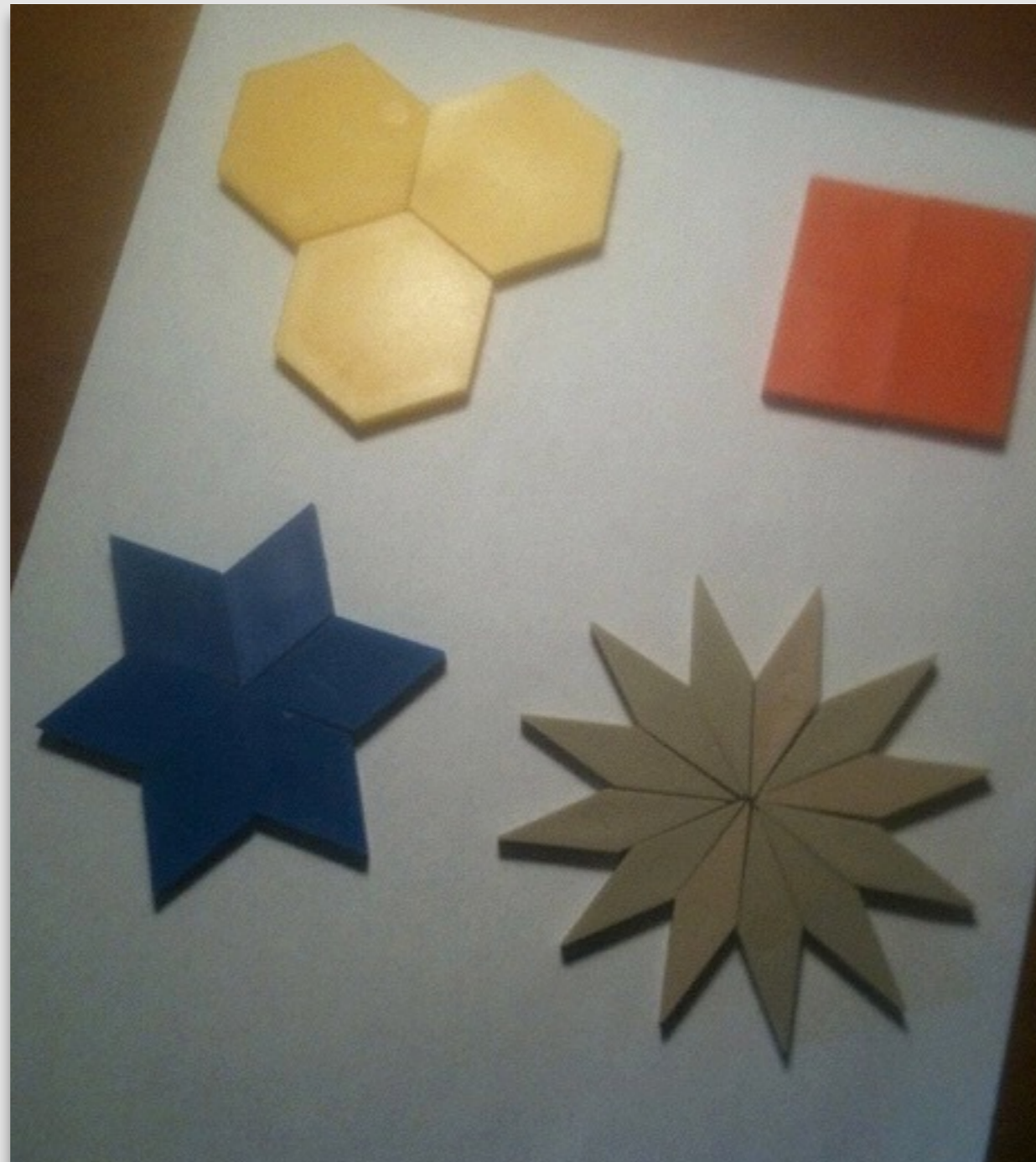


Angles Around a Point

Example: two colors, three blocks

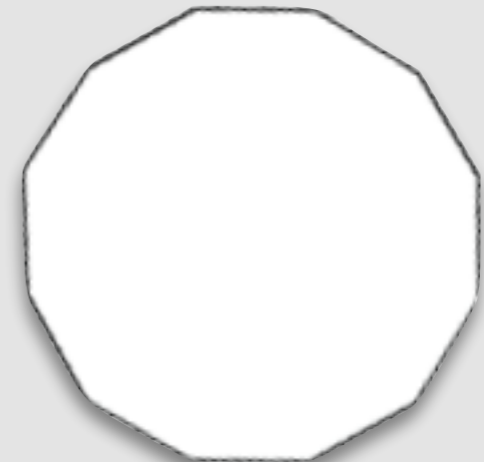
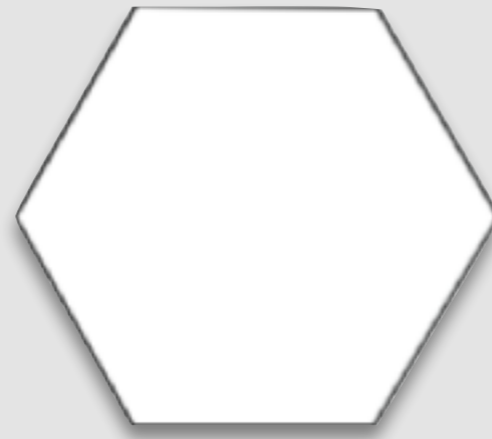
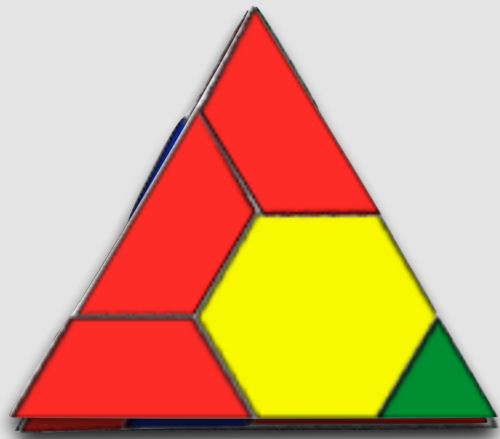


Pattern Block Angles



Tiling

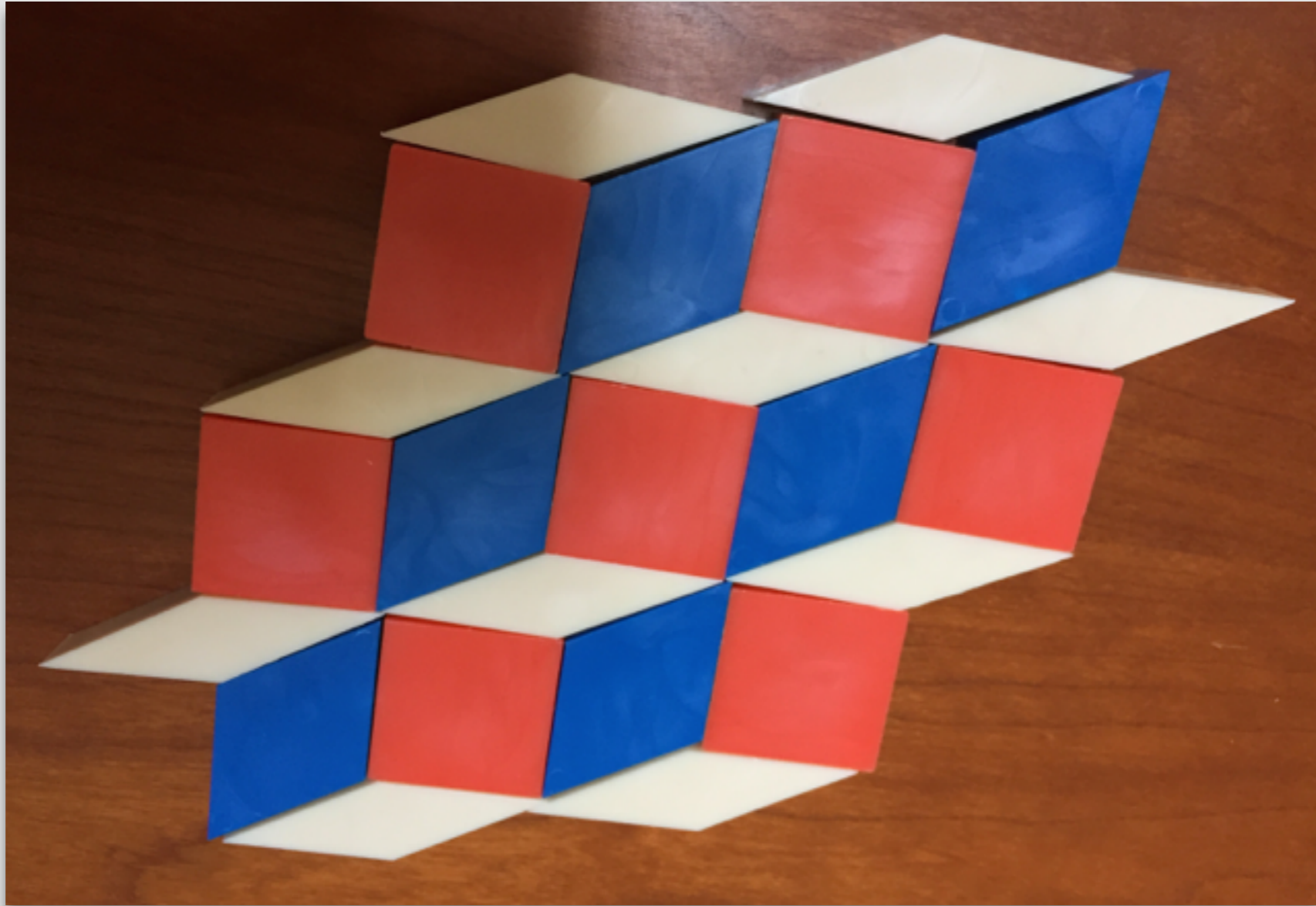
Symmetry



Fewest / most blocks

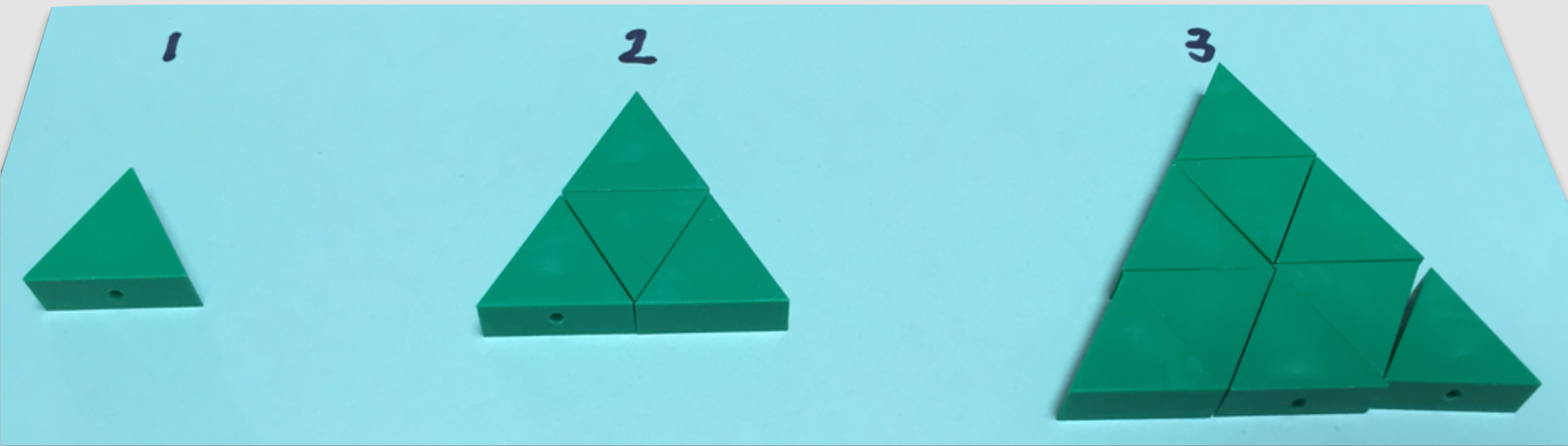
Fewest / most colors

Tiling the Plane

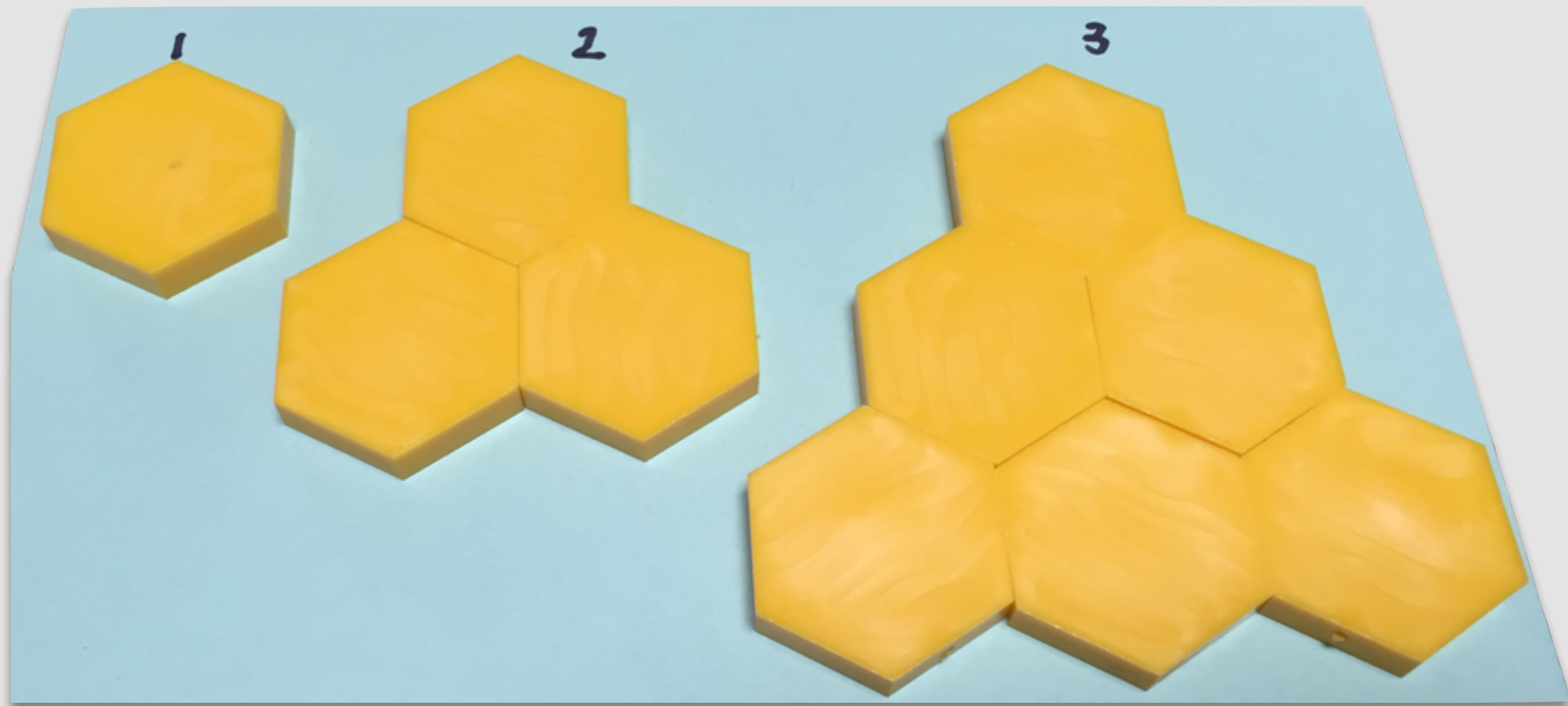


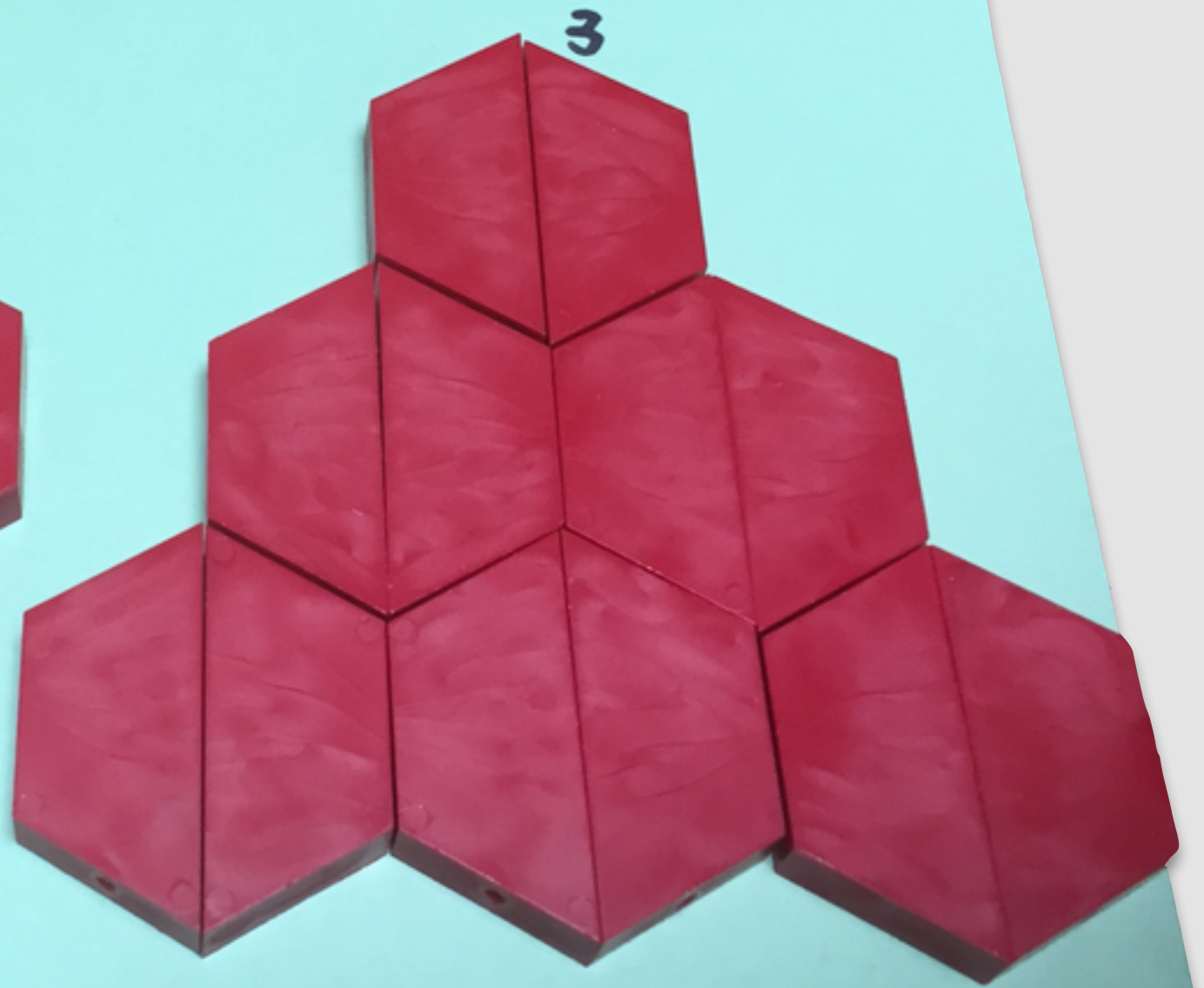
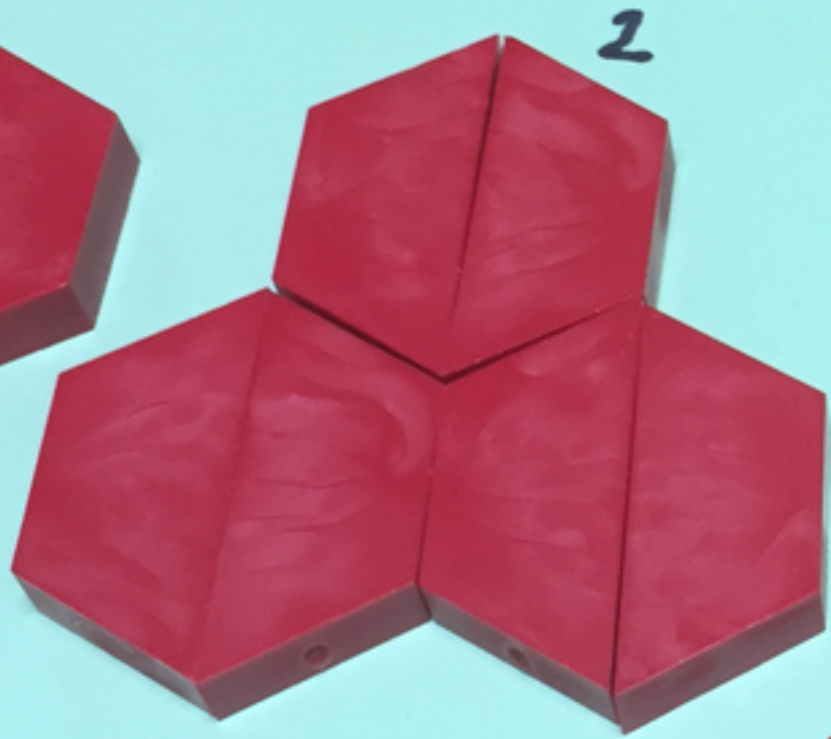


Number Patterns



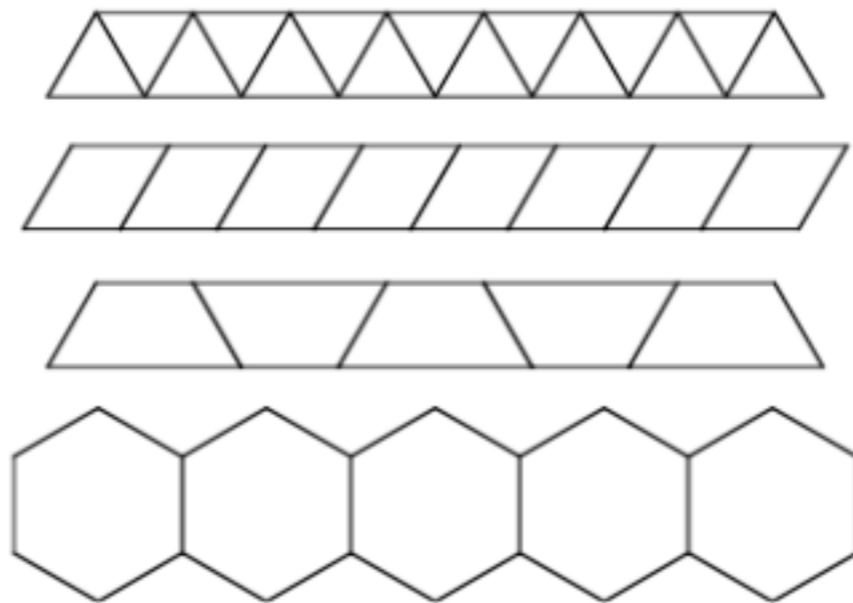
Same pattern in orange?





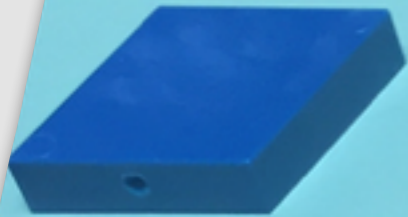
Perimeter

Pattern block trains



Fancy Trains

1



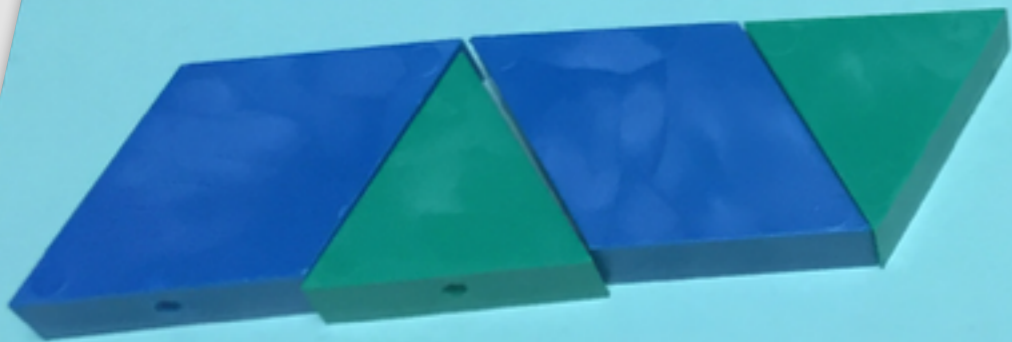
2



3






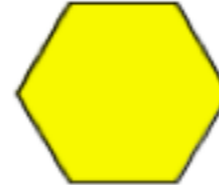


4



5



\$3	
\$4	  
\$5	
\$6	

For each price, what is the least possible perimeter for a pattern block figure?

Examples: for \$6, the least perimeter is 4
 for \$7, the least perimeter is 5

