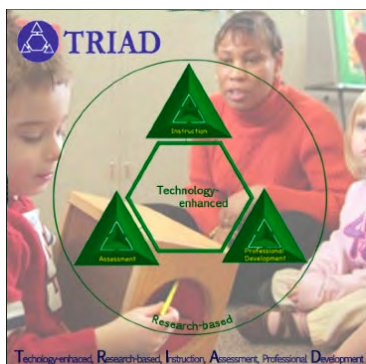


<http://www.linkedin.com/in/douglascléments>  
<http://du.academia.edu/DouglasClements>

<http://www.triadscaleup.org/>



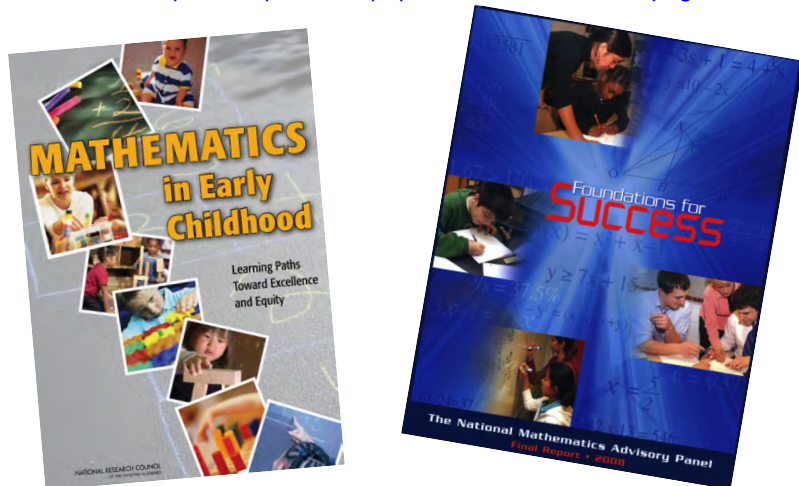
[www.routledge.com/9780415828505](http://www.routledge.com/9780415828505)

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[www.team.mcgraw-hill.com](http://www.team.mcgraw-hill.com)

NRC [www.nap.edu/openbook.php?record\\_id=12519&page=R1](http://www.nap.edu/openbook.php?record_id=12519&page=R1)

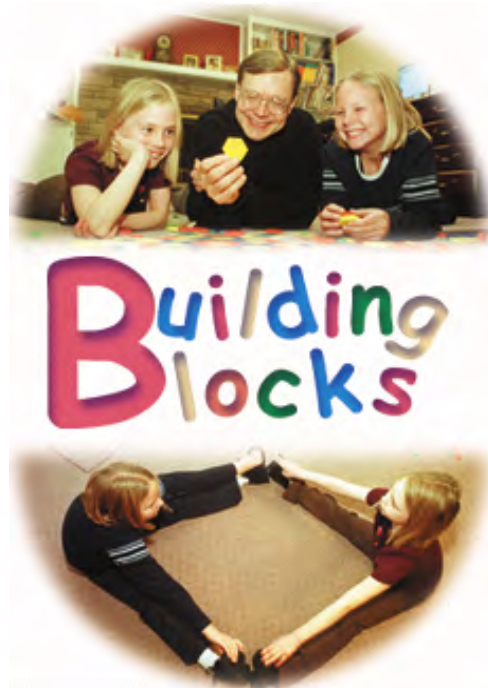


National Math Panel—<http://www.ed.gov/>

## Lessons from Research

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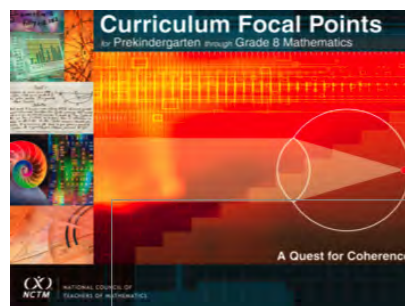
[www.mheonline.com/earlychildhoodconnection/](http://www.mheonline.com/earlychildhoodconnection/)

<http://www.buildingblocksmath.org/>

for research, <http://www.triadscaleup.org/>



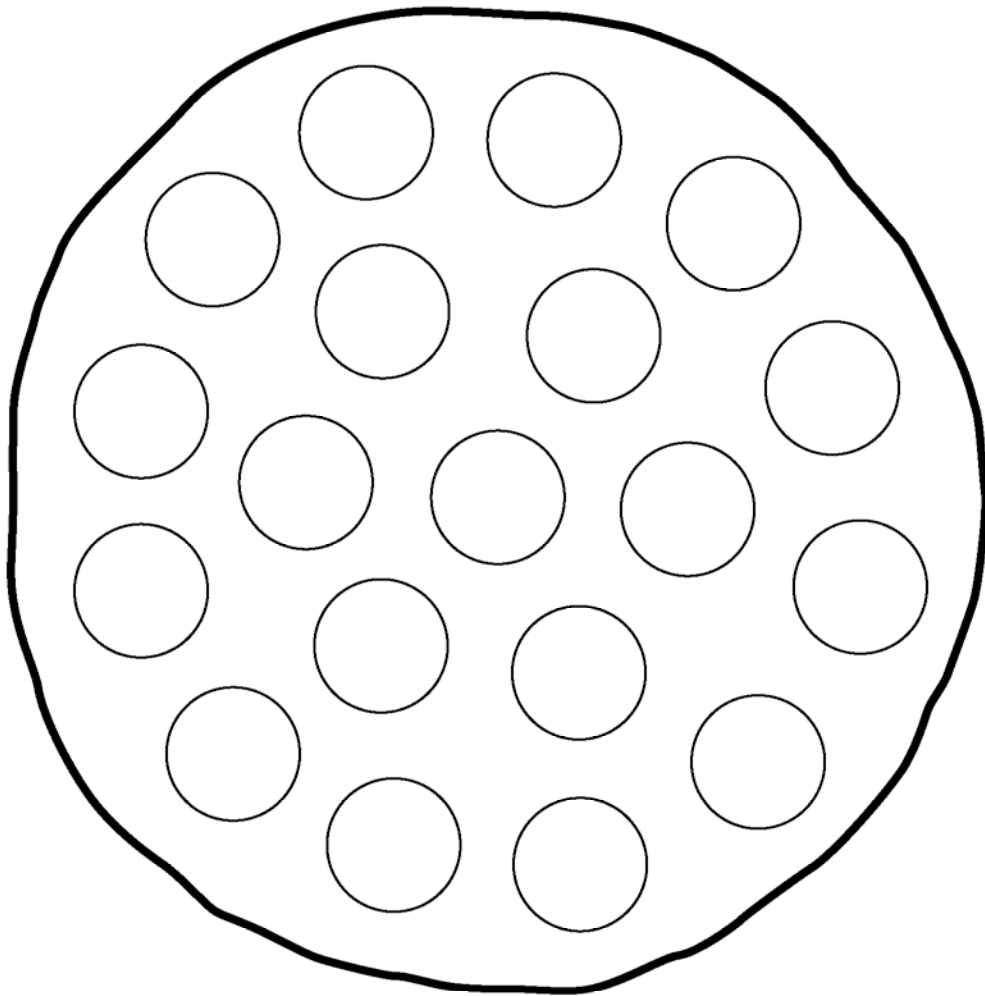
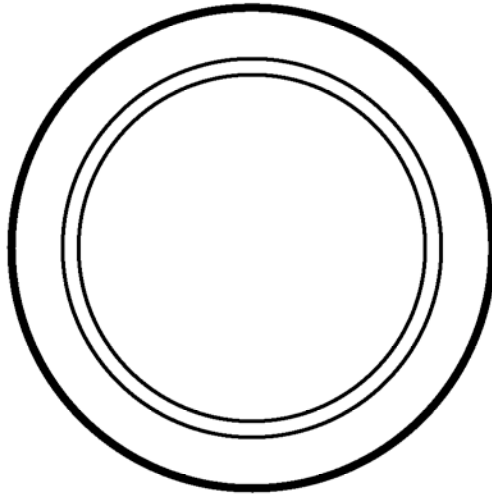
<http://corestandards.org/>  
<http://commoncoretools.wordpress.com/>



NCTM — [www.nctm.org](http://www.nctm.org)



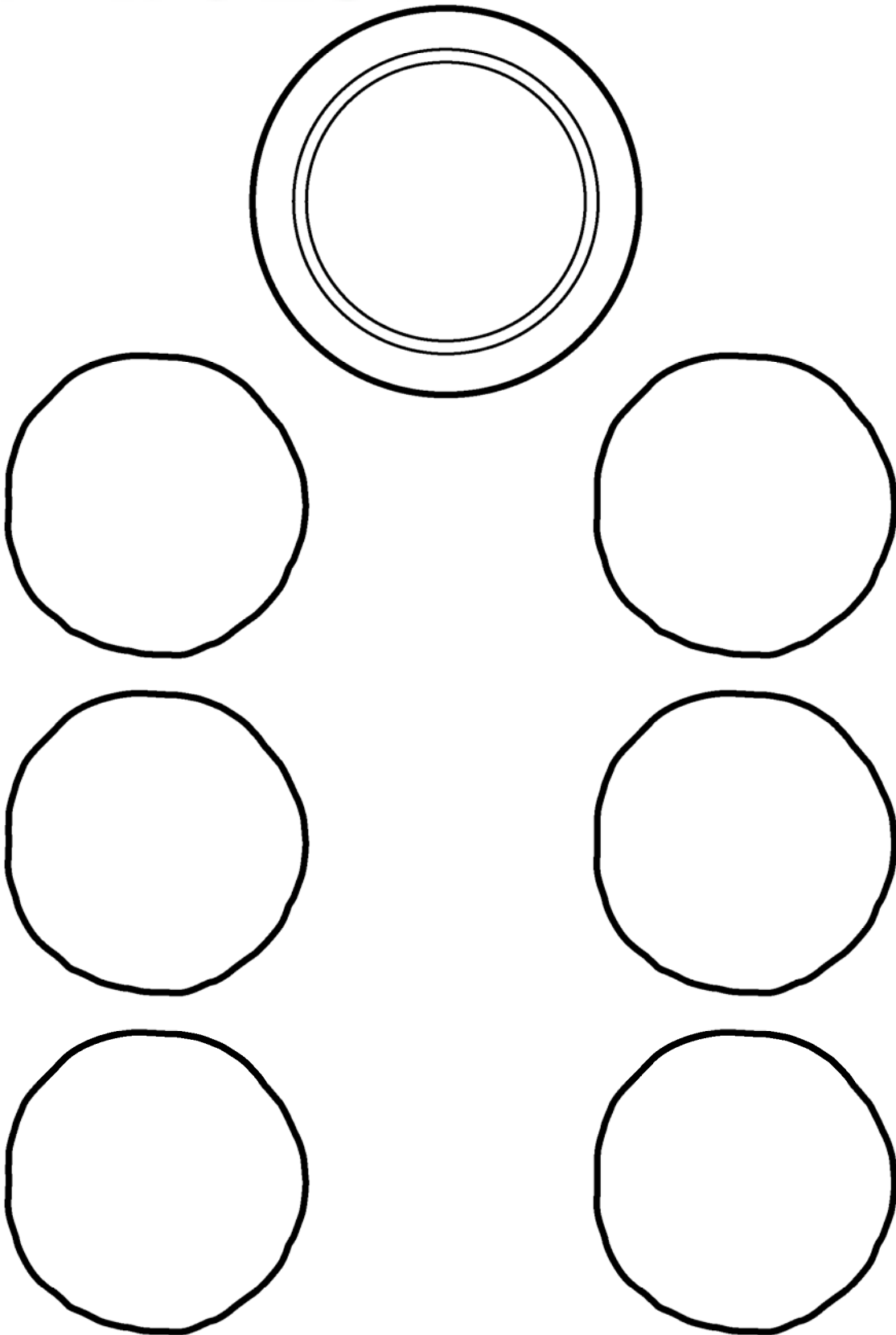
# Pizza Game 1



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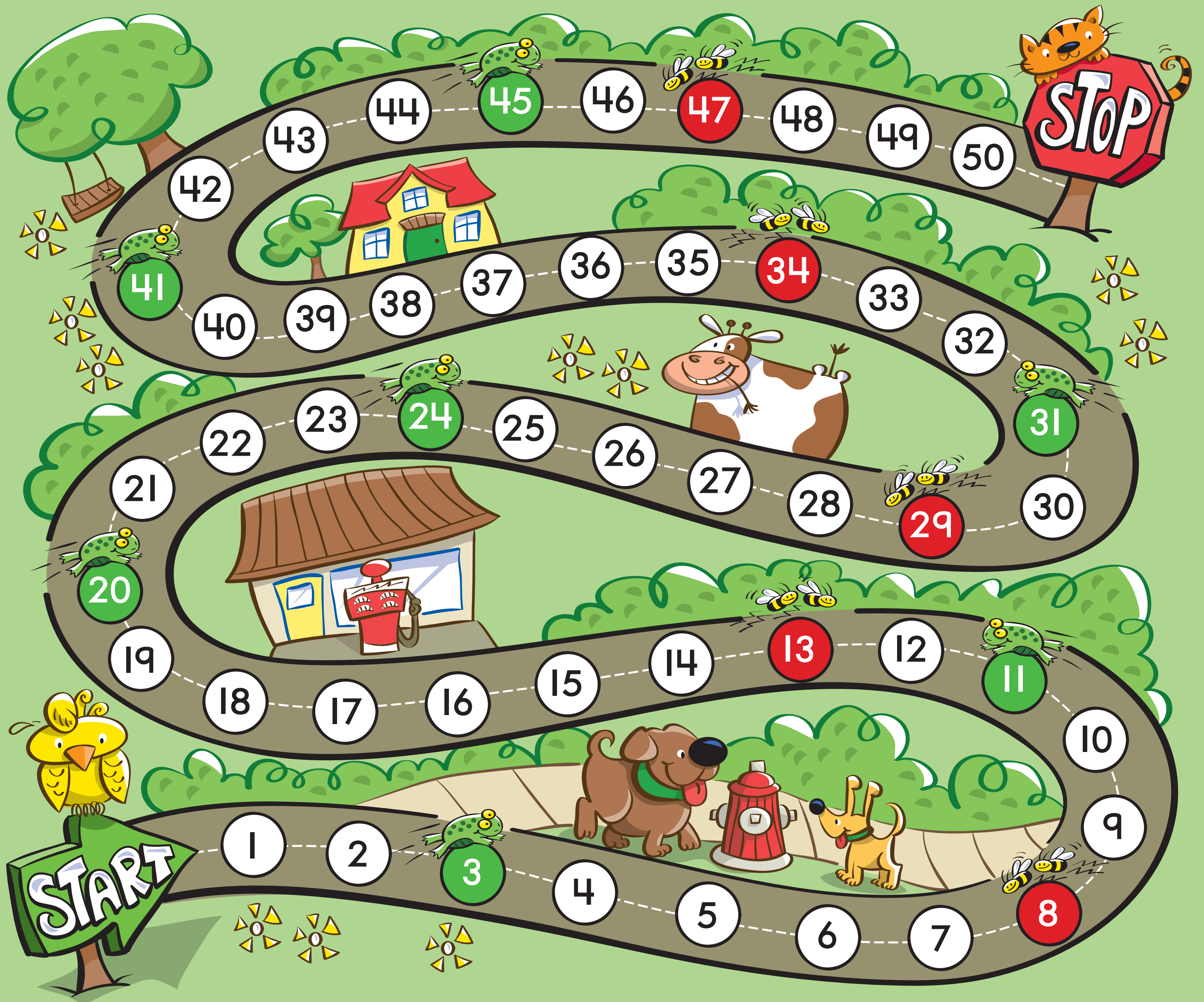


# Pizza Game 2



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START

STOP

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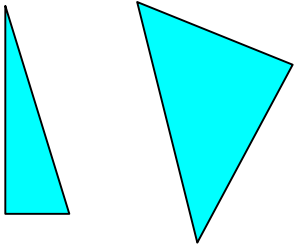
50

Places Scene: Dinosaur



# SHAPE DESCRIPTIONS

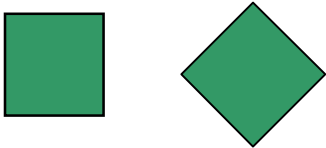
## Triangle



- 3 straight sides - all connected
- 3 angles
- can be different sizes, shapes, orientations (directions)
- If all sides are the same length and all angles are the same length, is "regular" or "equilateral". If two sides are the same length, is "isosceles." If one angles is right, it's a "right triangle".

Do *not* say: 2 points at bottom, one at top  
flat bottoms  
"pointy"  
like piece of pizza

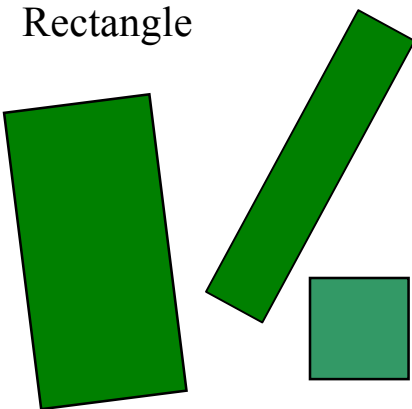
## Square



- all 4 straight sides same length – all connected
- all 4 right angles (squares are "regular" polygons)
- two pairs parallel sides
- can be different sizes, orientations (directions)

Do *not* say: "turned/slanted" one is a "diamond"

## Rectangle



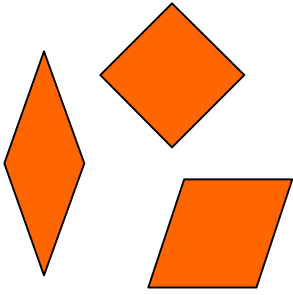
- 4 straight sides – all connected
- 4 right angles
- opposite sides are same length
- if *all* sides are the same length, it's *also* a square
- 2 pairs parallel lines
- can be different sizes, shapes, orientations (directions)

Do *not* say: two long sides and two short sides  
rectangles are "long"



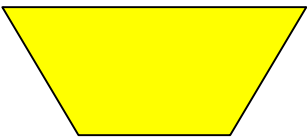
## SHAPE DESCRIPTIONS

### Rhombus



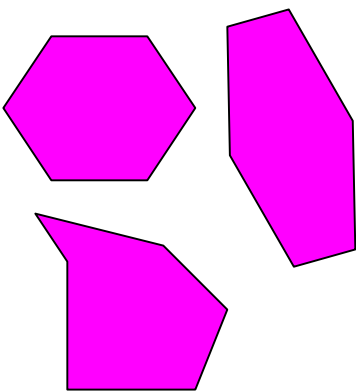
- 4 straight sides - all same length – all connected
- 2 pairs parallel lines
- 4 angles, opposite angles equal
- if the angles are right angles, it's *also* a square

### Trapezoid



- 4 straight sides – all connected
- 4 angles
- 1 pair of parallel lines
- if the non-parallel sides are the same length, it's an "isosceles trapezoid." If one right angles, a "right trapezoid"

### Hexagon

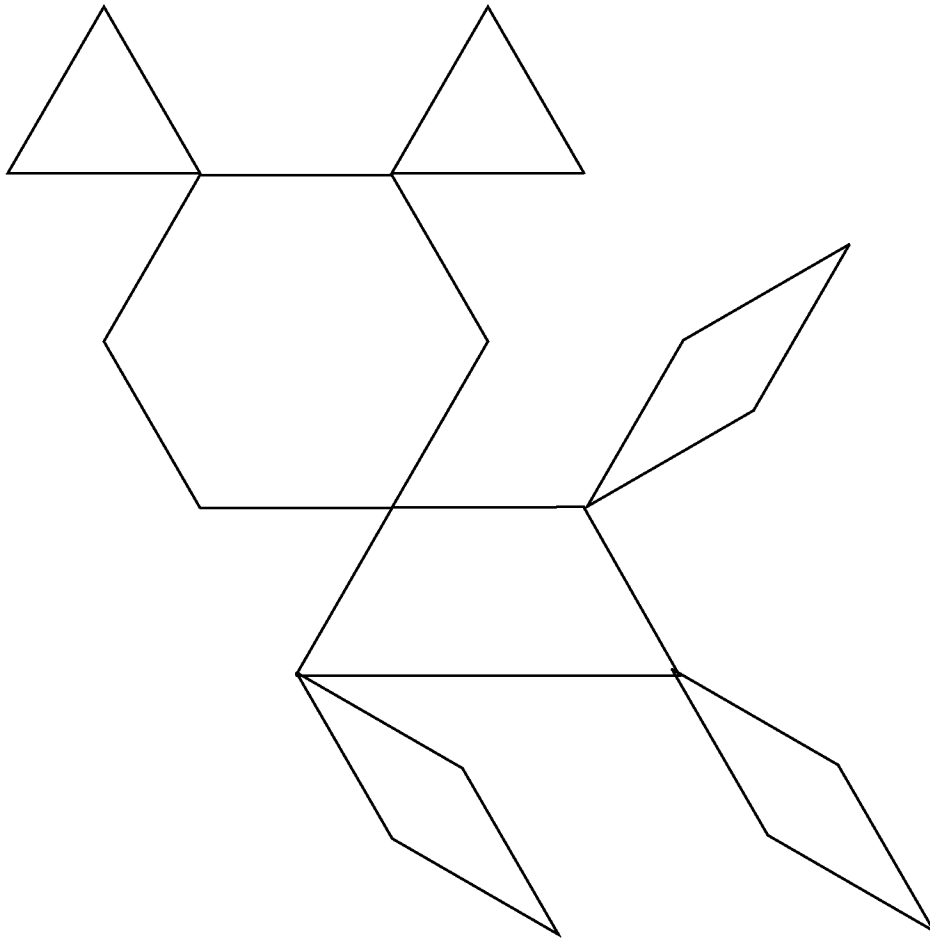


- 6 straight sides – all connected
- 6 angles
- for *regular* polygons: all sides equal and all angles equal

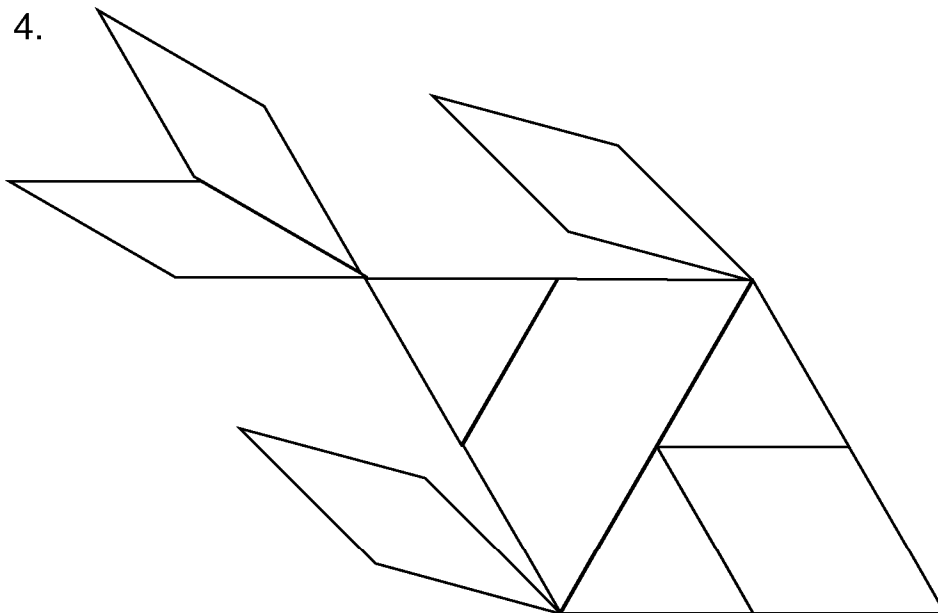


# Pattern Block Puzzles

3.



4.



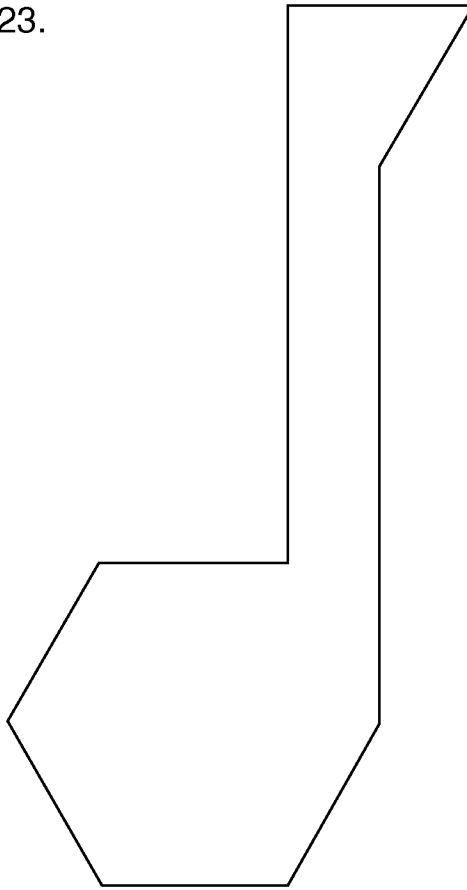
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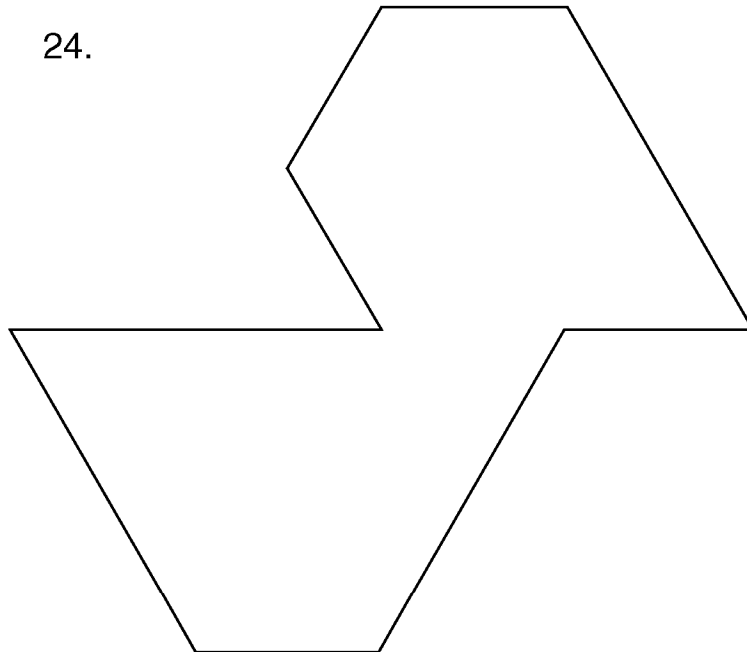


# Pattern Block Puzzles

23.



24.

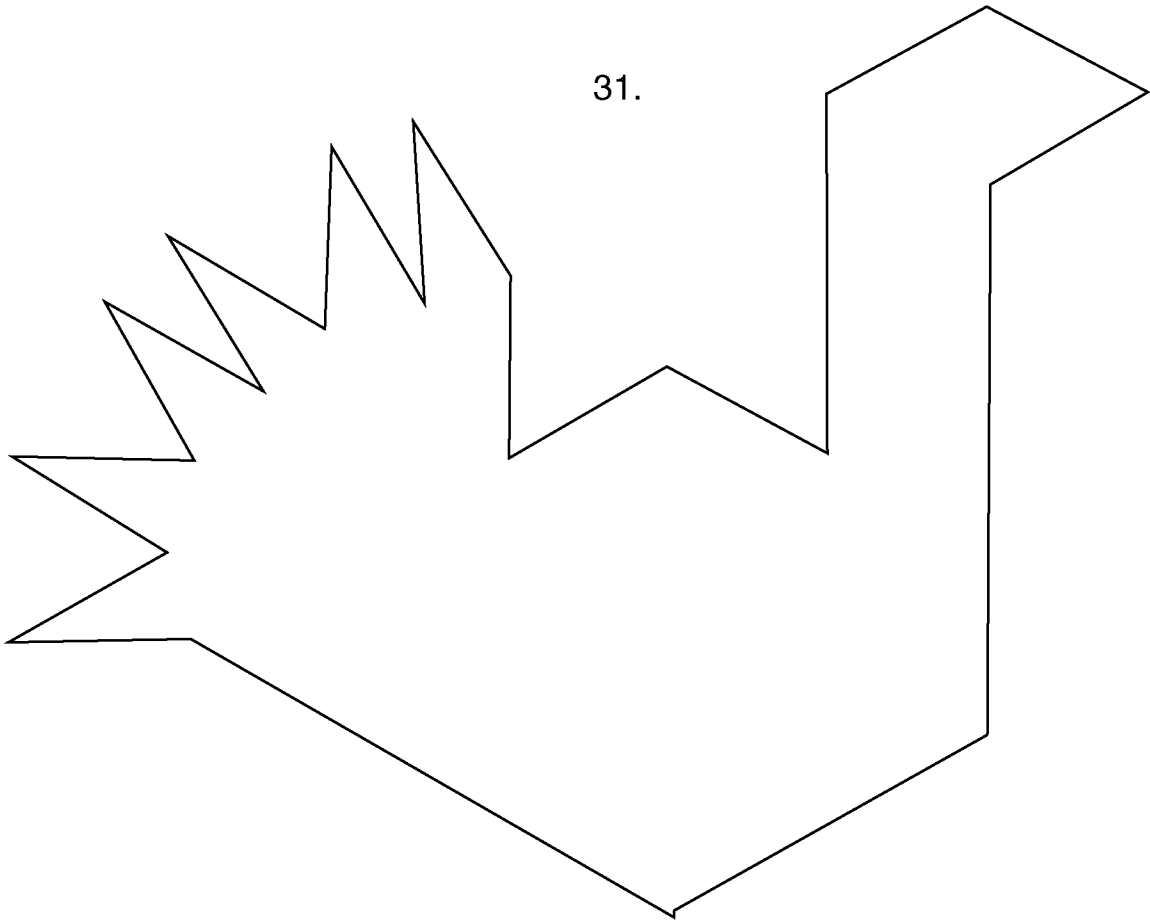


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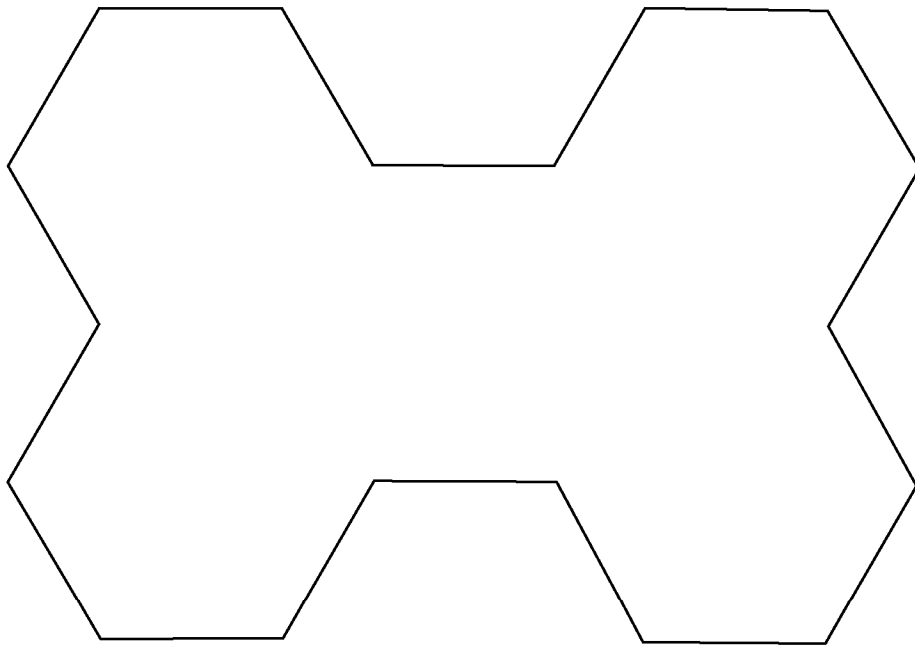


# Pattern Block Puzzles

31.



32.



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