MONTH 3

Geometry & Spatial Reasoning

Monthly Learning Goals

Month 3 invites students to explore geometry through hands-on puzzles, visual challenges, symmetry, and real-world observation. Students will learn to recognize how shapes can be combined, transformed, reflected, and found in the world around them.

Through tangrams, line-symmetry drawings, shape identification, and a geometry scavenger hunt, students will strengthen spatial reasoning while learning to describe their observations using precise mathematical language.

By the End of This Month, Students Should Be Able To:

- Identify and describe common two-dimensional shapes.
- Combine geometric pieces to create a target figure.
- Visualize how shapes can be rotated, reflected, or rearranged.
- Complete a figure using a line of symmetry.
- Recognize right, acute, and obtuse angles.
- Find examples of geometric ideas in everyday surroundings.
- Explain the spatial strategy used to solve a visual puzzle.

Skills We Will Practice

Spatial Reasoning
Mentally rotating, reflecting, and rearranging geometric pieces.

Shape Composition
Combining smaller shapes to create a larger figure or silhouette.

Symmetry
Using a line of reflection to complete and analyze a design.

Geometric Vocabulary
Describing shapes, lines, and angles with accurate terms.

Mathematical Observation
Noticing geometric structures in objects and environments.

This Month's Activities

- Tangram construction and silhouette puzzles
- Animal tangram challenges
- Line-symmetry drawings
- Symmetry answer comparisons
- Shape recognition cards
- Geometry scavenger hunt

Connection to the Rest of the Year

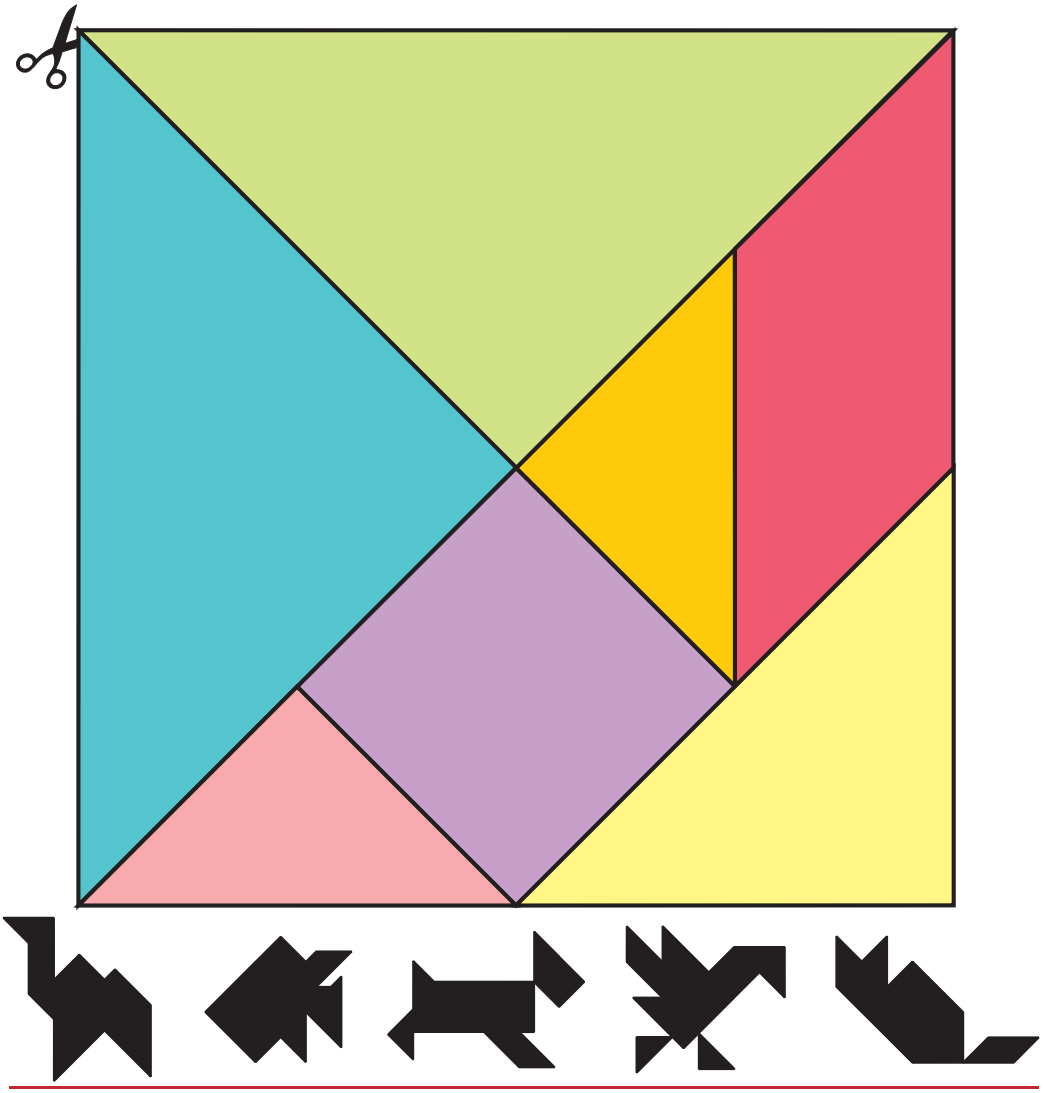
Month 3 extends the visual pattern recognition and strategic experimentation developed in Months 1 and 2. Spatial reasoning and geometric representation will support later work with measurement, area, probability models, diagrams, and competition-style problems.

TANGRAM

The ancient Chinese art of tangram puzzles is a popular mathematical problem solving activity. The tangram puzzle consists of 7 geometric pieces, known as tans, which are normally boxed in the shape of a square. There are two small, one medium and two large triangles, one parallelogram and one square.

The objective of the puzzle is to form a specific shape (given only an outline or silhouette) using all seven pieces, which may not overlap.

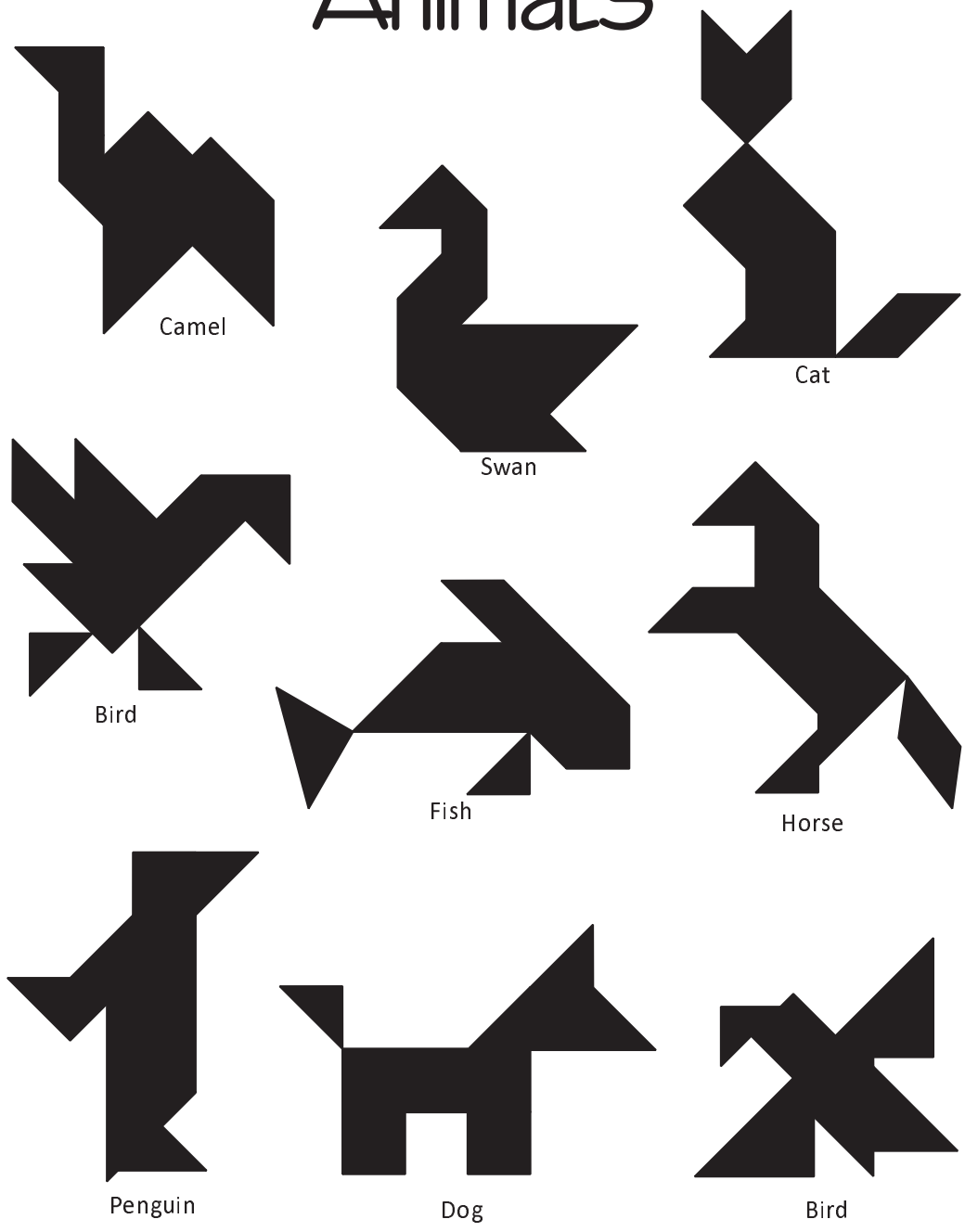
Cut out 7 tangram pieces and use them to solve the puzzles by creating the shapes on these activity sheets.



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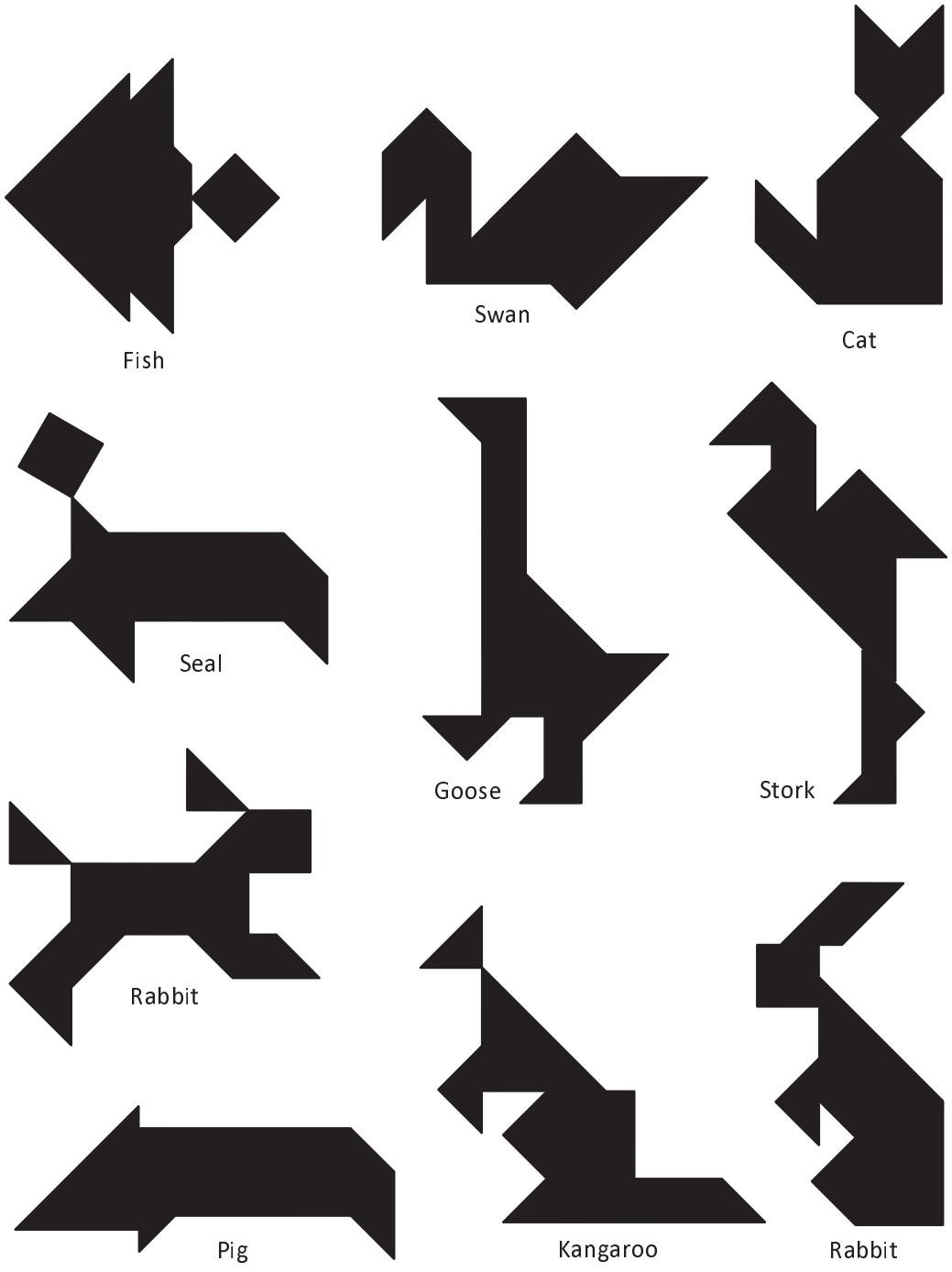
TANGRAM

Animals



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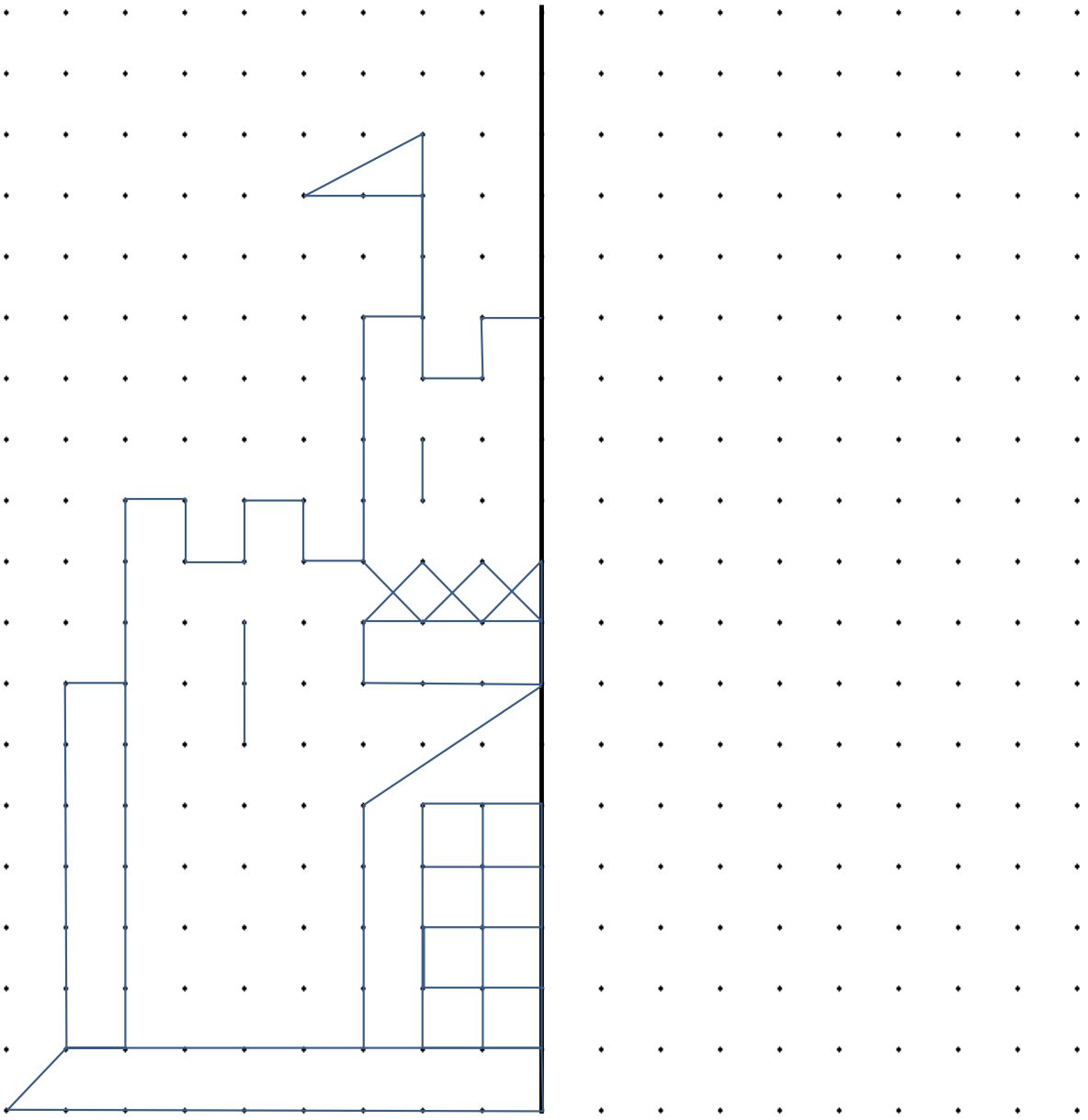
TANGRAM



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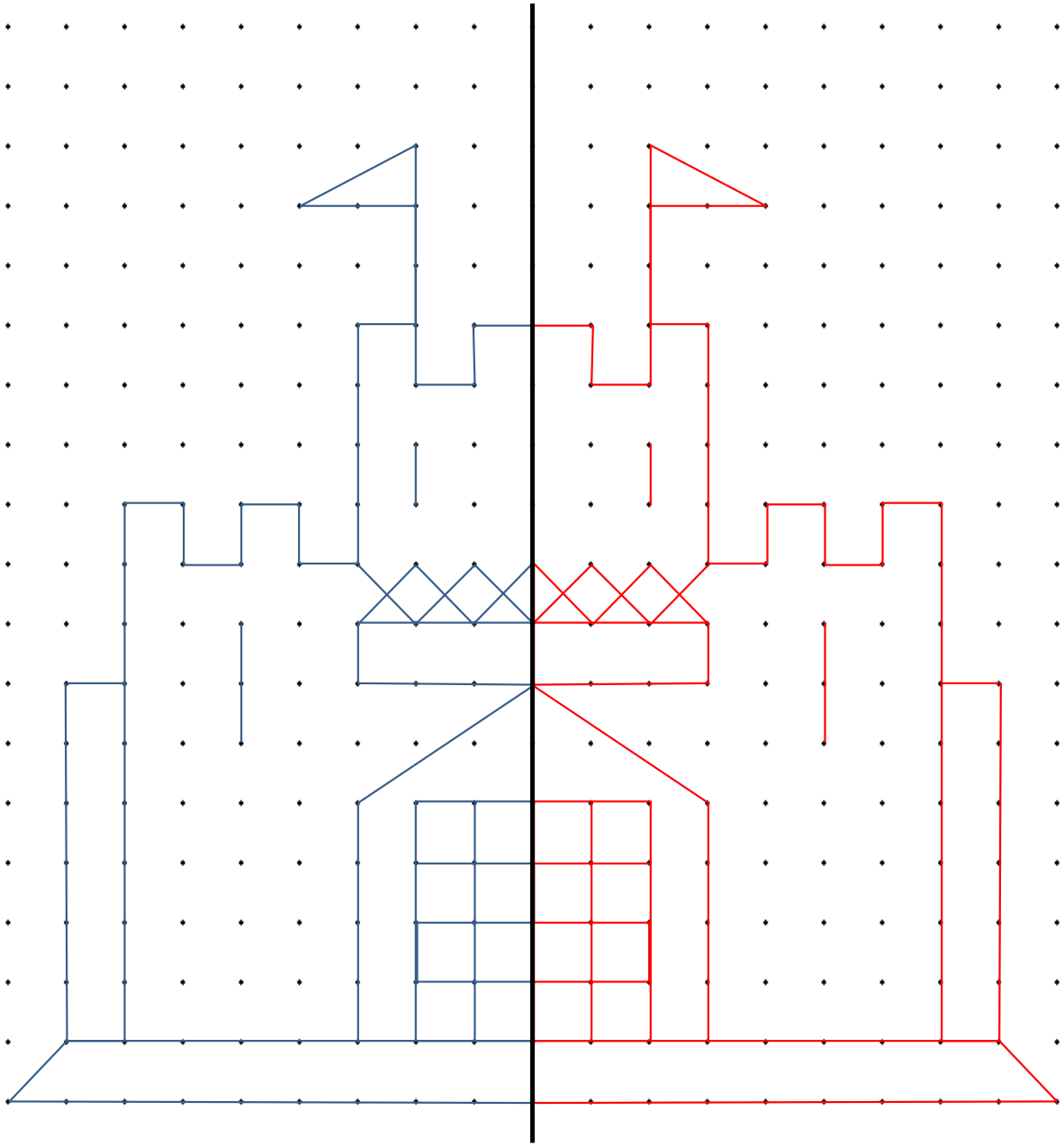
1 LINE SYMMETRY PICTURE CASTLE



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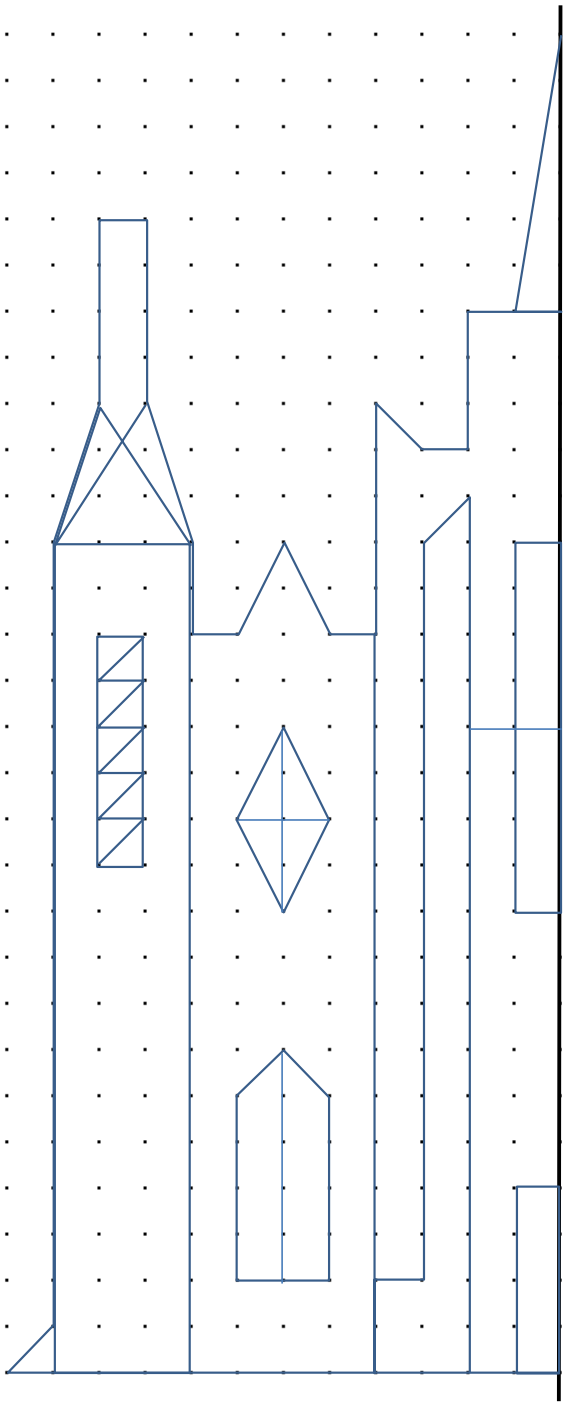
1 LINE SYMMETRY PICTURE CASTLE ANSWERS



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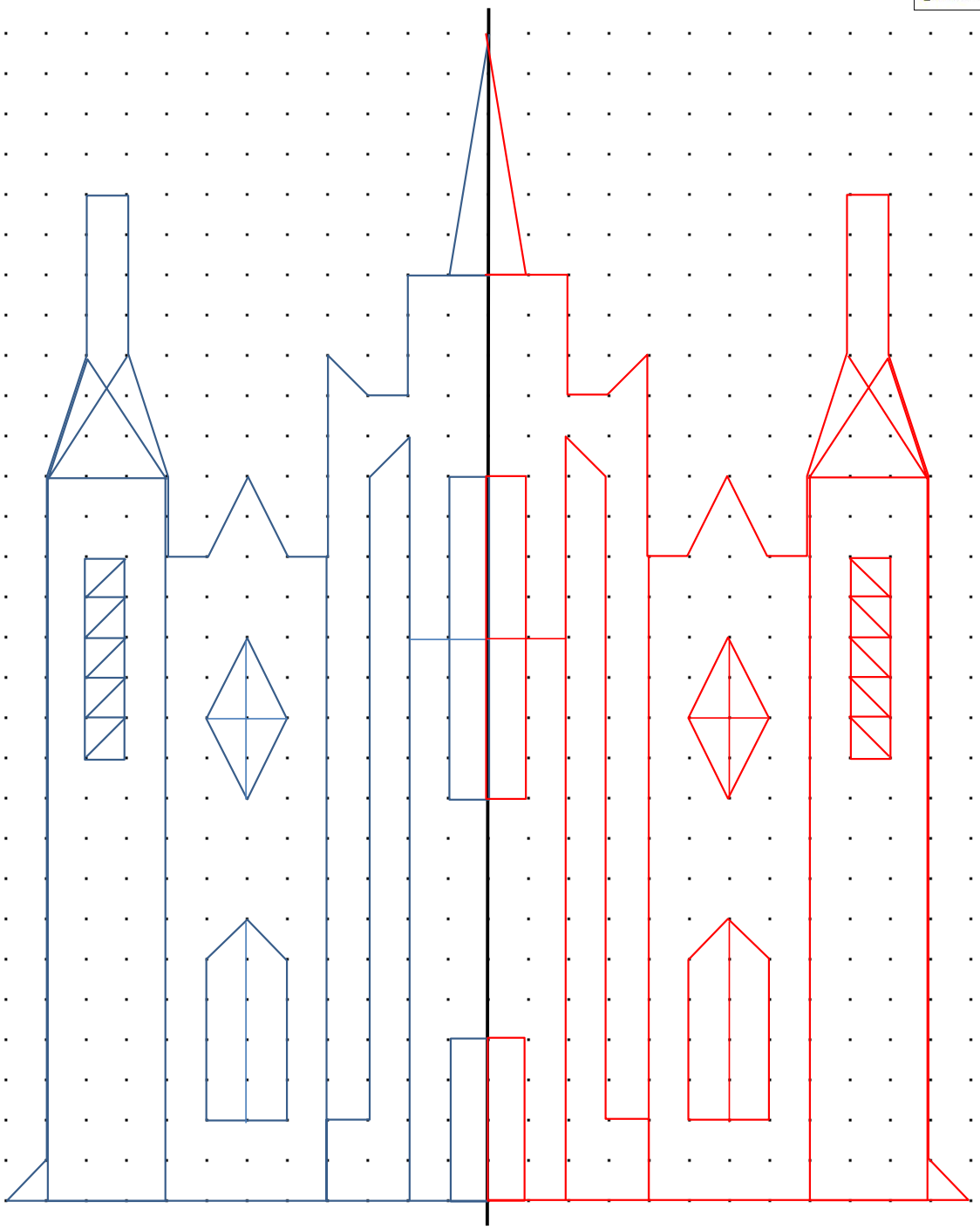
LINE SYMMETRY BUILDING 3



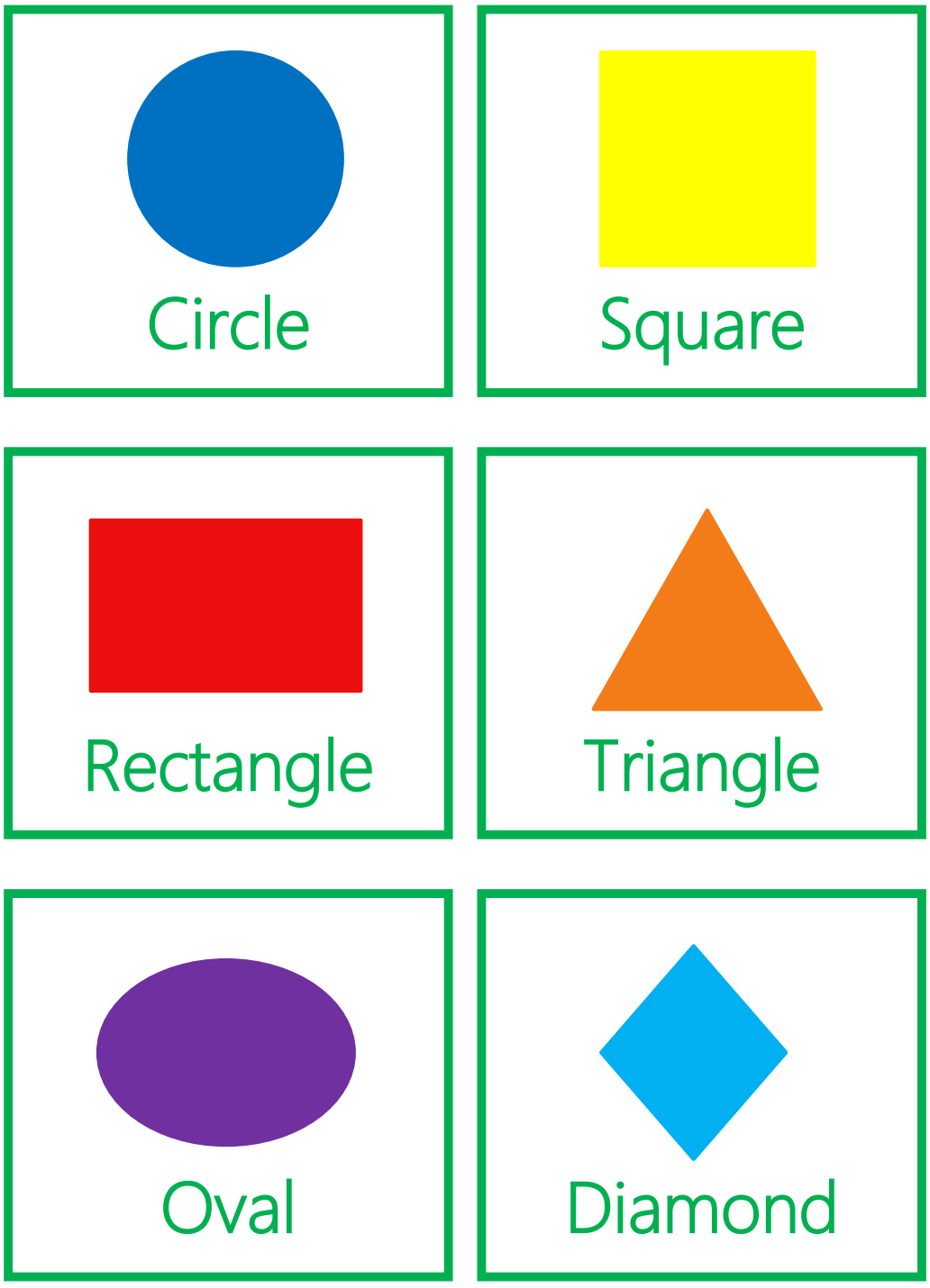
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LINE SYMMETRY BUILDING 3 ANSWERS

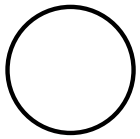
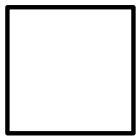
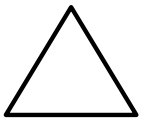
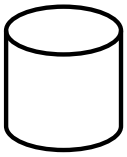
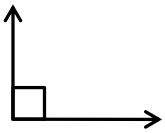
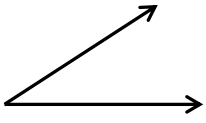
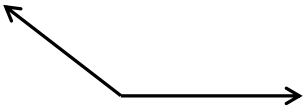


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Geometry Scavenger Hunt

Find this shape or angle	List or draw the shapes you find
Circle 	
Square 	
Triangle 	
Cylinder 	
Line 	
Right Angle 	
Acute Angle 	
Obtuse Angle 	

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