4.G.A

Identify lines and angles, and classify shapes by properties of their lines and angles.

1. Draw line segment CD on the graph.



2. Put an X in the box that matches each figure with its description. Each figure may be matched to more than one description.

|  | **Has at least one right angle** | **Has at least one pair of perpendicular sides** | **Has at least on pair of parallel sides** |
| --- | --- | --- | --- |
| A rectangleRectangle |  |  |  |
| A non-square rhombusRhombus |  |  |  |
| A non-rectangular parallelogramParallelogram |  |  |  |

3. This chart shows one way to classify quadrilaterals. Draw a quadrilateral that belongs in the box labeled “Has Exactly One Right Angle.”



4. Draw **all** the lines of symmetry for the shapes.

If there are no lines of symmetry, write None in the shape.

   

5. Use the following directions to draw and label objects in the space below.

 a. Draw and label two points: *A* and *B*.b. Use a straightedge to draw $\overbar{AB}$.
 c. Draw a new point that is not on $\overbar{AB}$. Label it *C*.
 d. Draw $\vec{BC}$.
 e. Draw a new point that is not on $\overbar{AB}$ or $\rightharpoonaccent{BC}$. Label it *D*.
 f. Draw $\overleftrightarrow{AD}$.
 g. Identify angle *DAB* by drawing an arc to indicate the position of the angle.
 h. Identify another angle by referencing points that you have already drawn. \_\_\_\_\_\_\_\_\_

**Teacher Material**

4.G.A

Identify lines and angles, and classify shapes by properties of their lines and angles.

| **Question** | **Claim** | **Key/Suggested Rubric** |
| --- | --- | --- |
| 1[[1]](#footnote-1) | 1 | **1 point:** A grid with four points plotted and labeled. From the upper left to the bottom right, the points are labeled C, D, F, E. A line segment connects points C and D. |
| 21 | 1 | **1 point:**

|  | **Has at least one right angle** | **Has at least one pair of perpendicular sides** | **Has at least on pair of parallel sides** |
| --- | --- | --- | --- |
| A rectangleRectangle | X | X | X |
| A non-square rhombusRhombus |  |  | X |
| A non-rectangular parallelogramParallelogram |  |  | X |

 |
| 31 | 1 | **1 point:** Answers may vary.The chart shows a rectangle at the top labeled Quadrilaterals. Three lines are drawn down from that rectangle. Each line is connected to a rectangle with a grid inside. From left to right, the first rectangle says "Has Exactly One Right Angle" and shows a quadrilateral with only one right angle. The second rectangle says "Has Exactly Two Right Angles" and shows a trapezoid drawn on the grid. The third rectangle says "Has Exactly Four Right Angles" and shows a rectangle drawn on the grid. |
| 4[[2]](#footnote-2) | 1 | **1 point:** From left to right, three figures are drawn. THe first is an isoceles triangle with a line of symmetry drawn from the top vertex to the base. The second figure is a non-rectangular parallelogram with the word "None" written inside. The third figure is a square with four lines of symmetry: one vertical, one horizontal, and two diagonal. |
| 5[[3]](#footnote-3) | 1 | **1 point:** Drawings may vary.A drawing with points, from left to right and top to bottom, A, B, C, and D. a segment connects A and B. A ray is drawn starting at B through C. A line is drawn to pass through A and D. Angle DAB has a single angle mark. Angle CBA has double angle marks.Another angle is angle ABC. |

1. From Smarterbalanced.org. Grade 4, Claim 1, Target L Item Specifications. Internet. Available from <http://www.smarterbalanced.org/smarter-balanced-assessments/>; accessed 11/2015. [↑](#footnote-ref-1)
2. From Smarterbalanced.org. Grade 4, Claim 1, Target L Item Specifications. Internet. Available from <http://www.smarterbalanced.org/smarter-balanced-assessments/>; accessed 11/2015. [↑](#footnote-ref-2)
3. From EngageNY.org of the New York State Education Department. Grade 4 Mathematics Module 4, Topic A, Lesson 1. Internet. Available from <https://www.engageny.org/resource/grade-4-mathematics-module-4-topic-lesson-1>; accessed 11/2015. [↑](#footnote-ref-3)