LESSON MAKER PRO

Draw It Straight

Show points, segments, rays, angles, and lines clearly.

GRADE 4 · 4.MG.4.c

4.MG.4.c "Draw representations of points, line segments, rays, angles, and lines, using a ruler or straightedge."

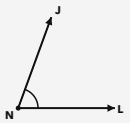
NAME _____ DATE _____

GEOMETRY DRAWING RULES

A point shows one exact place. A line segment has two endpoints, a ray starts at one endpoint and continues in one direction, and a line continues in both directions. An angle is made by two rays that share an endpoint called a vertex.

WORKED EXAMPLE

Look at the angle. Name its vertex and its two rays.



1. Find the dot where both rays meet.
2. The shared endpoint is labeled N.
3. One ray goes from N through L, and the other goes from N through J.

Answer: Vertex N; rays NL and NJ.

PRACTICE 6 problems

1 Draw a point named H.

ANSWER _____

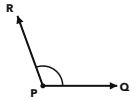
2 Draw line segment AB. Do not put arrows on the segment.

ANSWER _____

3 Draw ray CD. Make C the endpoint, and put an arrow on the end past D.

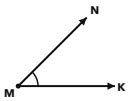
ANSWER _____

4 Look at the angle. Name its vertex and its two rays.



ANSWER _____

5 Copy the angle shown. On your copy, label the vertex G. Label one point H and the other point J, one on each ray.



ANSWER _____

6 Draw line UV. Put an arrow at both ends. Then draw point W so it is not on line UV.

ANSWER _____

APPLY IT Show your work

1 At the school garden, a watering hose starts at pump P, goes past the tomato bed T, and continues in the same direction. Draw the hose route as a ray. Label it correctly and show where it keeps going.

WORK SPACE

ANSWER _____

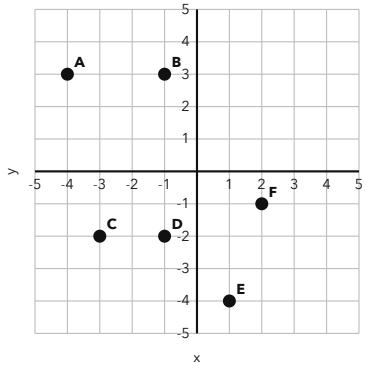
2 In a video game map, a light trail goes forever in both directions through markers M and N. A bridge connects markers R and S and stops at both markers. Draw both paths.

WORK SPACE

ANSWER _____

CHALLENGE One step up

On the grid, draw segment AB, ray CD beginning at C and passing through D, and line EF. Then name the drawing that has exactly two endpoints.



WORK SPACE AND ANSWER

ANSWER KEY

Draw It Straight

GRADE 4 · 4.MG.4.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Draw a point named H.	**A dot labeled H.**
2	Draw line segment AB. Do not put arrows on the segment.	**A line segment with endpoints A and B.**
3	Draw ray CD. Make C the endpoint, and put an arrow on the end past D.	**Ray CD with endpoint C and an arrow past D.**
4	Look at the angle. Name its vertex and its two rays.	**Vertex P; rays PQ and PR.**
5	Copy the angle shown. On your copy, label the vertex G. Label one point H and the other point J, one on each ray.	**A copied angle with vertex G and rays GH and GJ.**
6	Draw line UV. Put an arrow at both ends. Then draw point W so it is not on line UV.	**A line through U and V with arrows at both ends, and a point W not on the line.**

PART 2 · APPLY IT

1. **Ray PT with endpoint P and an arrow past T.** Draw a dot for P and a dot for T. Draw a straight path from P through T, with one arrow beyond T.
2. **Line MN with arrows at both ends; segment RS with endpoints R and S.** The light trail is a line because it continues both ways. The bridge is a segment because it has two endpoints.

CHALLENGE

Draw segment AB, ray CD, and line EF. Segment AB has exactly two endpoints.

Accept straight, clearly labeled drawings with the required endpoints and arrows. For copied angles, accept either placement of H and J on the two rays, as long as G is the shared endpoint.