## Skills Readiness

**22** *Points, Lines, and Planes* 

Object	Definition	Notation
Point	A location in space that has no size.	· A
Segment	A part of a line consisting of two endpoints and all the points between.	ĀB
Ray	A part of a line consisting of one endpoint and all the points of the line on one side of the endpoint.	ĀB
Line	A series of points that extends without end in opposite directions.	<i>ĂB</i>
Plane	A flat (two-dimensional) surface that extends without end in all directions. A plane has no thickness.	Э

Example: Use the diagram to name a point, a segment, a ray, a line, and a plane (if possible).



<u>Answers</u> Any one of the following are points: *A*, *B*, *C*, or *D*. There are two segments:  $\overline{BA}$  and  $\overline{BC}$ . There are two rays:  $\overline{BA}$  and  $\overline{BC}$ . There are no lines. There is one plane:  $\mathcal{P}$ 

## **Practice on Your Own**

Use the diagram to the right to name each of the following.

**1.** a point \_\_\_\_\_

**3.** a segment \_\_\_\_\_ **4.** a ray \_\_\_\_\_

**5.** a plane \_\_\_\_\_

**6.** a ray with endpoint O

2. a line \_\_\_\_\_

**5.** a plane \_\_\_\_\_ **6.** a

7. the line that passes through the point *M*\_\_\_\_\_

- **8.** the plane that contains the point *Q*\_\_\_\_\_
- 9. a segment with one endpoint at point O\_\_\_\_\_
- 10. the point where lines *MP* and *ON* meet \_\_\_\_\_

## Check

Use the diagram to the right to name each of the following.

11. two points \_\_\_\_\_ and \_\_\_\_\_

- **12.** a segment \_\_\_\_\_
- **13.** two rays \_\_\_\_\_ and \_\_\_\_\_
- **14.** a line \_\_\_\_\_
- **15.** two planes \_\_\_\_\_ and \_\_\_\_\_
- 16. the plane that contains line CD\_



T

Q•

M