## Lines

<table>
<thead>
<tr>
<th>Description</th>
<th>Figure</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point</strong></td>
<td><img src="image" alt="Point" /></td>
<td>P or Point P</td>
</tr>
<tr>
<td><strong>Line</strong></td>
<td><img src="image" alt="Line" /></td>
<td>NO or ON</td>
</tr>
<tr>
<td><strong>Line Segment</strong></td>
<td><img src="image" alt="Line Segment" /></td>
<td>EF or FE</td>
</tr>
<tr>
<td><strong>Ray</strong></td>
<td><img src="image" alt="Ray" /></td>
<td>QR</td>
</tr>
</tbody>
</table>

A point is a position in space. It has no size.

A line is a set of points along a straight path that extends infinitely in both directions.

A line segment is a part of a line that has two endpoints.

A ray is a part of a line that has one end point and extends infinitely in one direction.
Lines Practice

1 Identify each figure that contains points X and Y as a line, a line segment, or a ray.

(a) \[ \text{X} \quad \text{Y} \]
(b) \[ \text{X} \quad \text{Y} \]
(c) \[ \text{X} \quad \text{Y} \]

2 Use letters and symbols to name each figure.

(a) \[ \text{P} \quad \text{Q} \]
(b) \[ \text{T} \quad \text{W} \]
(c) \[ \text{A} \quad \text{C} \]

3 Use a straight edge or ruler to draw the following figures.

(a) \[ \text{NO} \]
(b) \[ \text{TP} \]
(c) \[ \text{ID} \]

4 An angle is formed when two rays have a common endpoint. Name the two rays that form the following angle.

\[ \text{A} \quad \text{C} \]
\[ \text{T} \]
5. In this drawing of Line XZ, Rays YZ and YX meet at a point to form a straight line. Name all the rays other than Ray YZ and YX shown in the figure.

6. (a) Name all the line segments and rays shown in the figure.

(b) Which line segments form a triangle?

7. Draw two lines CT and MP that intersect at Point O. Then name pairs of rays that form angles that are not straight lines.