



## Mini-Map for M.EE.8.G.5

Subject: Mathematics

Geometry (G)

Grade: 8

### Learning Outcome

DLM Essential Element	Grade-Level Standard
<p><b>M.EE.8.G.5</b> Compare any angle to a right angle, and describe the angle as greater than, less than, or congruent to a right angle.</p>	<p><b>M.8.G.5</b> Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.</p>

### Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
<p>Recognize attributes or characteristics of an object, such as color, orientation, length, width, and weight.</p>	<p>Recognize an angle as a figure formed by two rays sharing one endpoint.</p>	<p>Recognize angles that are either acute, obtuse, or right.</p>	<p>Compare the measure of an angle to the measure of a right angle, and communicate whether the measure of the angle is greater than, less than, or congruent to the measure of the right angle.</p>	<p>Explain that complementary angles are pairs of angles with measures that add up to 90 degrees (e.g., a 40-degree angle and 50-degree angle).</p>

## Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

### *How is the Initial Precursor related to the Target?*

In order to recognize angles, students begin by learning to notice what is new. The educator draws the students' attention to new objects or stimuli, labels them (e.g., “this is a circle, and it does not have any sides,” “this is a rectangle, and it has four sides”) and the student observes, feels, or otherwise interacts with the shapes.

### *How is the Distal Precursor related to the Target?*

At this level, educators are providing students with specific vocabulary (line, line segment, point, and ray) that are used to form an angle. These are all denoted by certain characteristics (a line has arrows on both ends; a line segment includes both endpoints; a point is a dot on a graph, a line, line segment, or a number line; a ray is a line that has a well-defined starting point). Educators should take care to use the names “line,” “line segment,” “point,” and “ray” while defining and describing the angles. While students do not need to say the names, they do need to learn their meaning. Educators should teach these attributes within the context of working with angles.

## Instructional Resources

### Released Testlets

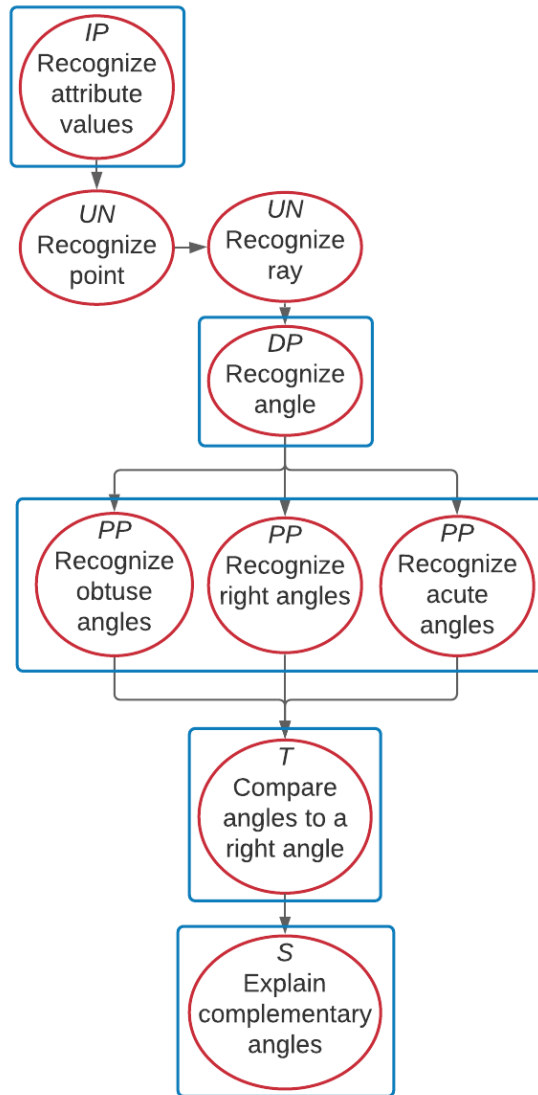
See the [Guide to Practice Activities and Released Testlets](#).

### Using Untested (UN) Nodes

See the document [Using Mini-Maps to Plan Instruction](#).

[Link to Text-Only Map](#)

**M.EE.8.G.5** Compare any angle to a right angle, and describe the angle as greater than, less than, or congruent to a right angle.



Map Key	
<b>IP</b>	Initial Precursor
<b>DP</b>	Distal Precursor
<b>PP</b>	Proximal Precursor
<b>T</b>	Target
<b>S</b>	Successor
<b>UN</b>	Untested
<b>Boxes</b> indicate tested nodes	