

Name \_\_\_\_\_

Date \_\_\_\_\_

Math 8

Geometry 9

# Geometry - Congruence



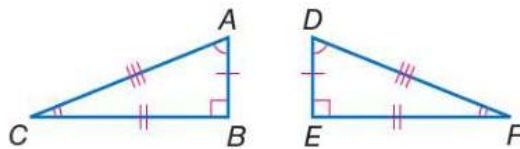
Symbol:

Meaning:

## Key Concept Corresponding Parts of Congruent Figures

**Words** If two figures are congruent, their corresponding sides are congruent and their corresponding angles are congruent.

**Model**



**Symbols**

$$\triangle ABC \cong \triangle DEF$$

Congruent Angles:  $\angle A \cong \angle D$ ;  $\angle B \cong \angle E$ ;  $\angle C \cong \angle F$

Congruent Sides:  $\overline{AB} \cong \overline{DE}$ ;  $\overline{BC} \cong \overline{EF}$ ;  $\overline{CA} \cong \overline{FD}$

## Review of Symbols

Line Segment

Line

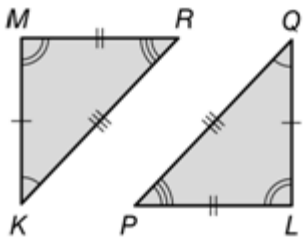
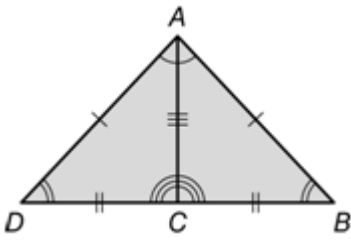
Ray

Angle

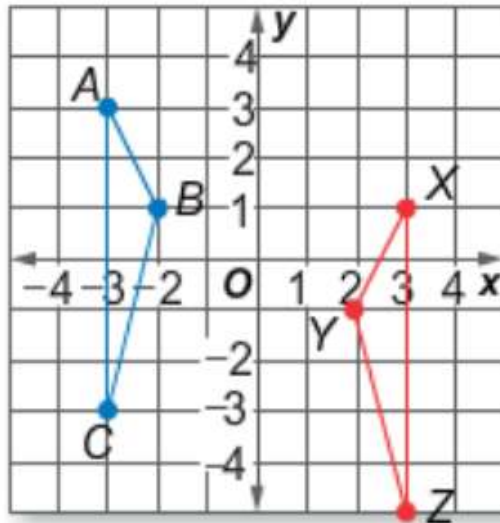
Measure of Angle

## Model Problems:

<p>1.)</p>	<p>Corresponding Angles:</p> <p>Corresponding Sides:</p>
<p>2.)</p>	<p>Corresponding Angles:</p> <p>Corresponding Sides:</p>

<p>3.)</p> 	<p>Corresponding Angles:</p> <p>Corresponding Sides:</p>
<p>4.)</p> 	<p>Corresponding Angles:</p> <p>Corresponding Sides:</p>

5) **Triangle  $ABC$  is congruent to  $\triangle XYZ$ . Write congruence statements comparing the corresponding parts. Then determine which transformations map  $\triangle ABC$  onto  $\triangle XYZ$ .**



6) **Miley is using a brace to support a tabletop. In the figure,  $\triangle BCE \cong \triangle DFG$ . If  $m\angle CEB = 50^\circ$ , what is the measure of  $\angle FGD$ ?**

