Section 2.4: Congruent Figures Name: _____

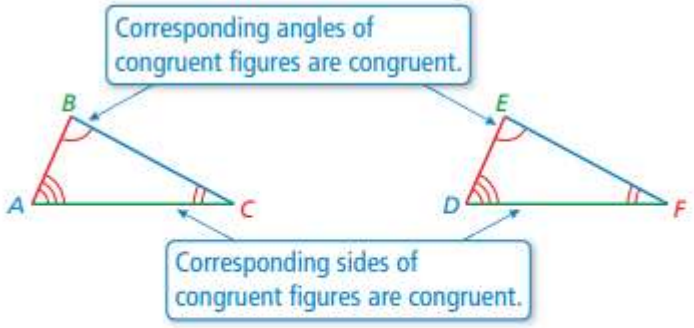
In Class Notes

A _____ _____ is a transformation that preserves side length and angle measure.

_____, _____, and _____ are rigid motions.

Two figures are _____ _____ when one can be obtained from the other by a series of rigid motions.

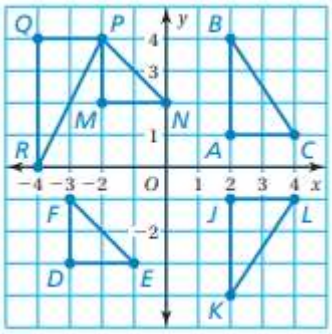
Congruent figures have the same _____ & _____.



Sides $\overline{AB} \cong \overline{DE}, \overline{BC} \cong \overline{EF}, \overline{AC} \cong \overline{DF}$

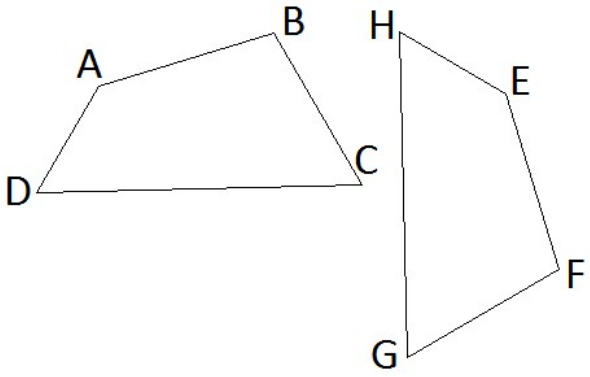
Angles $\angle A \cong \angle D, \angle B \cong \angle E, \angle C \cong \angle F$

Ex:) Identify any congruent figures in the coordinate plane. Notes:

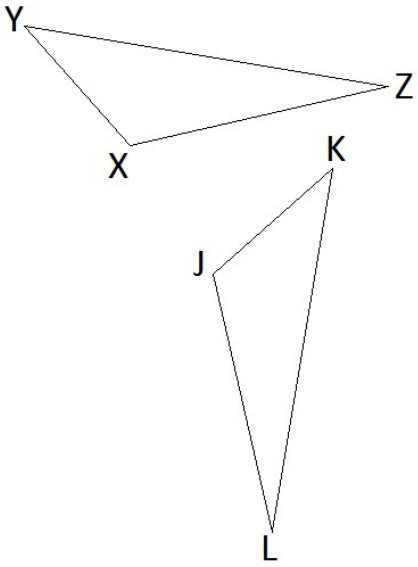


OYO:) A triangle has vertices X(0, 4), Y(4, 4), and Z(4, 2). Is ΔXYZ congruent to any of the triangles in the previous example? Explain.

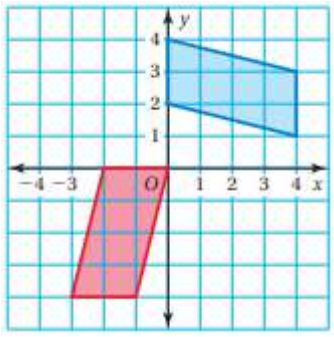
Ex:) Name the corresponding congruent parts of the given figures. Notes:



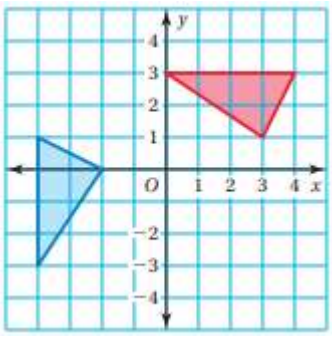
OYO:) Name the corresponding congruent parts of the given figures. Notes:



Ex:) The red figure is congruent to the blue figure. Notes:
Describe a sequence of rigid motions between the figures.



OYO:) The red figure is congruent to the blue figure. Notes:
Describe a sequence of rigid motions between the figures.



Ex:) You can use the buttons shown at the left to transform objects in a computer program.
You can rotate objects 90° in either direction and reflect objects in a horizontal or vertical line. How can you transform the emoji as shown below?

Pre-Image

Image

OYO:) How can you transform the emoji as shown below? Notes:

Pre-Image

Image