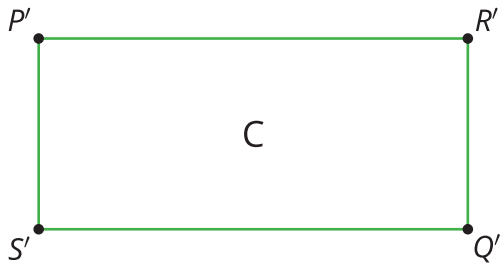
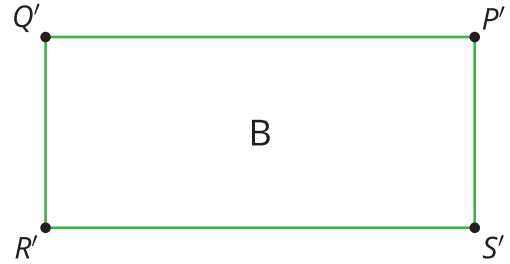
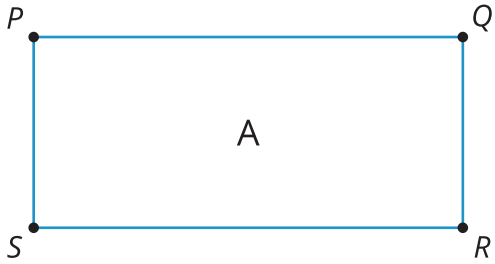


Unit 2 Lesson 1: Congruent Parts, Part 1

1 Notice and Wonder: Transformed Rectangles (Warm up)

Student Task Statement

What do you notice? What do you wonder?

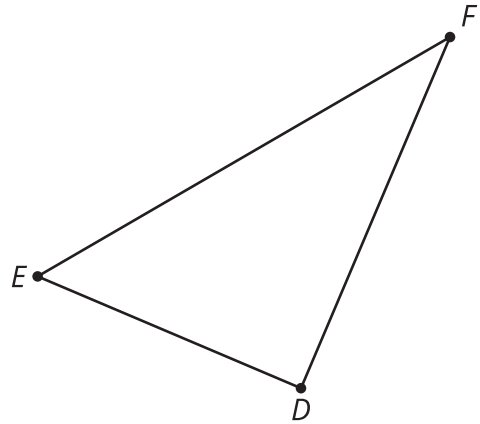
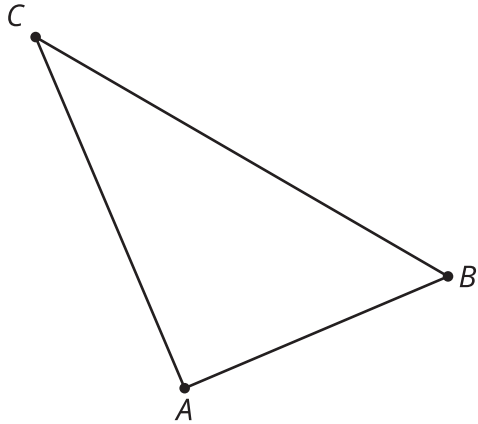


2 If We Know This, Then We Know That...

Student Task Statement

Triangle ABC is congruent to triangle DEF .

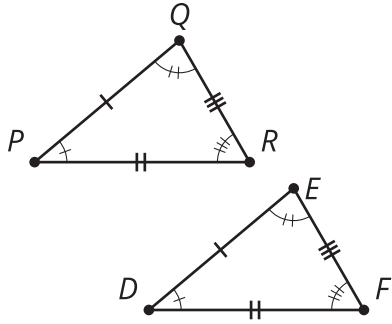
$$\triangle ABC \cong \triangle DEF$$



1. Find a sequence of rigid motions that takes triangle ABC to triangle DEF .
2. What is the image of segment BC after that transformation?
3. Explain how you know those segments are congruent.
4. Justify that angle ABC is congruent to angle DEF .

Activity Synthesis

$\triangle DEF \cong \triangle PQR$ so $\overline{PQ} \cong \overline{DE}$, $\overline{PR} \cong \overline{DF}$, $\overline{QR} \cong \overline{EF}$, $\angle P \cong \angle D$, $\angle Q \cong \angle E$, $\angle R \cong \angle F$



3 Making Quadrilaterals

Student Task Statement

1. Draw a triangle.
2. Find the midpoint of the longest side of your triangle.
3. Rotate your triangle 180° using the midpoint of the longest side as the center of the rotation.
4. Label the **corresponding** parts and mark what must be congruent.
5. Make a conjecture and justify it.
 - a. What type of quadrilateral have you formed?
 - b. What is the definition of that quadrilateral type?
 - c. Why must the quadrilateral you have fit the definition?