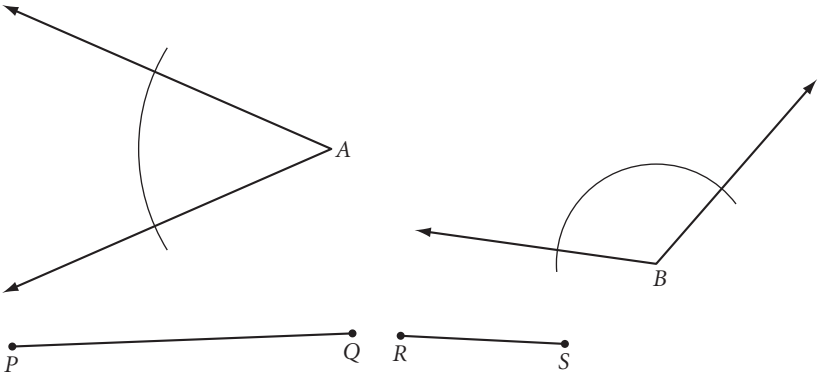
Duplicating Segments and Angles

Name _____ **Period** _____ **Date** _____

In Exercises 1–3, use the segments and angles below. Complete the constructions on a separate piece of paper.

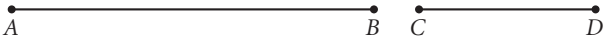


1. Using only a compass and straightedge, duplicate each segment and angle. There is an arc in each angle to help you.

2. Construct a line segment with length $3PQ - 2RS$.

3. Duplicate the two angles so that the angles have the same vertex and share a common side, and the nonshared side of one angle falls inside the other angle. Then use a protractor to measure the three angles you created. Write an equation relating their measures.

4. Use a compass and straightedge to construct an isosceles triangle with two sides congruent to $\overline{AB}$ and base congruent to $\overline{CD}$.



5. Repeat Exercise 4 with patty paper and a straightedge.

6. Construct an equilateral triangle with sides congruent to $\overline{CD}$.

Discovering Geometry Practice Your Skills