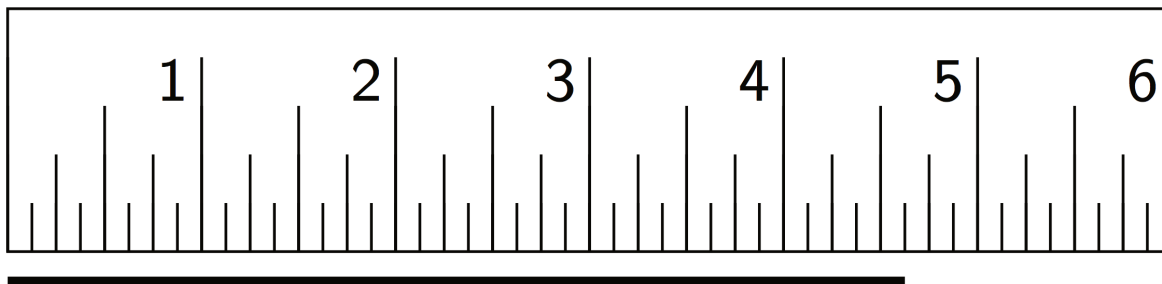# Unit 1 Lesson 7: No Bending or Stretching
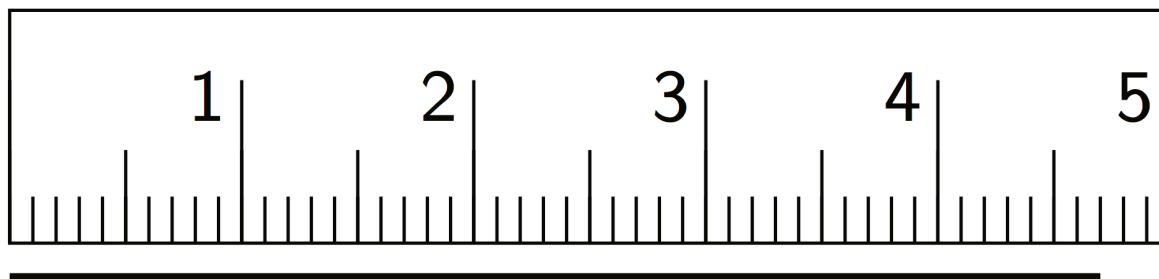
1 Measuring Segments (Warm up)

Student Task Statement

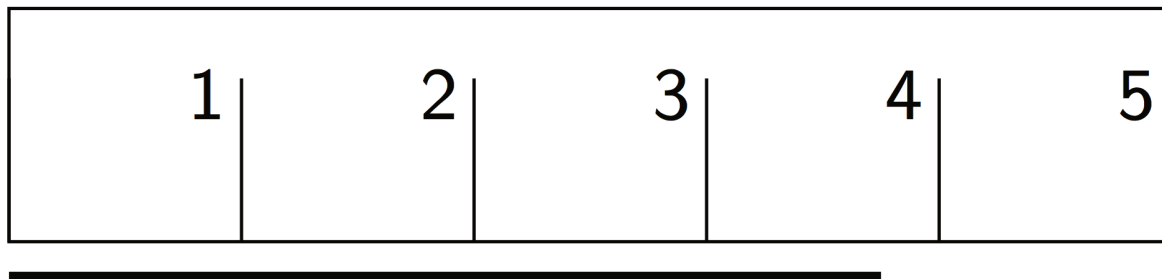For each question, the unit is represented by the large tick marks with whole numbers.

1. Find the length of this segment to the nearest $\frac{1}{8}$ of a unit.

2. Find the length of this segment to the nearest 0.1 of a unit.

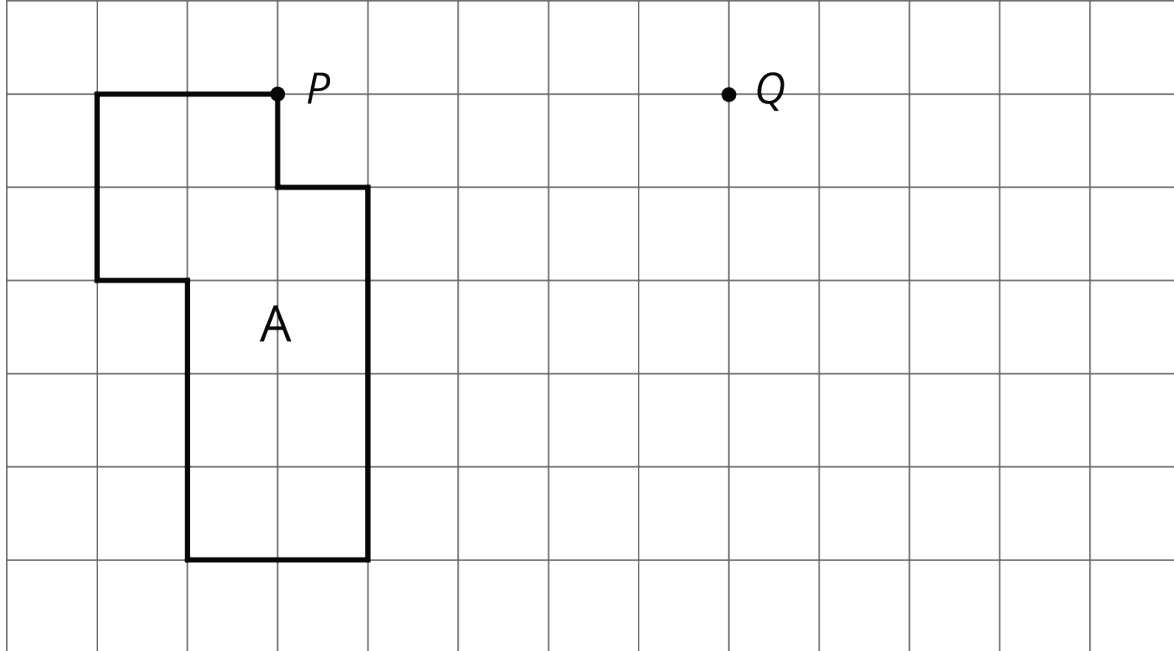3. Estimate the length of this segment to the nearest $\frac{1}{8}$ of a unit.

4. Estimate the length of the segment in the prior question to the nearest 0.1 of a unit.
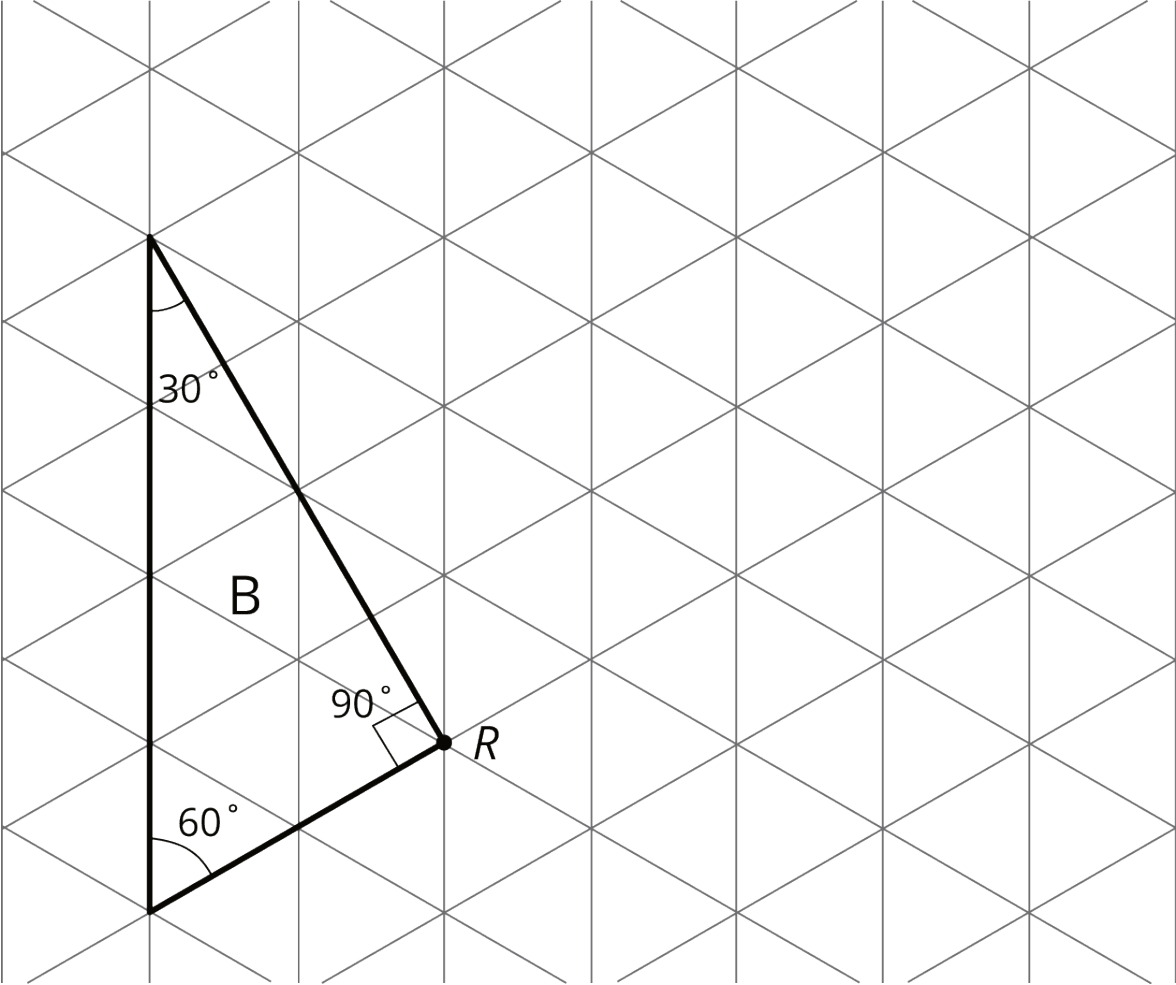
2 Sides and Angles

Student Task Statement

1. Translate Polygon A so point P goes to point Q. In the image, write the length of each side, in grid units, next to the side.


2. Rotate Triangle B 90 degrees clockwise using R as the center of rotation. In the image, write the measure of each angle in its interior.
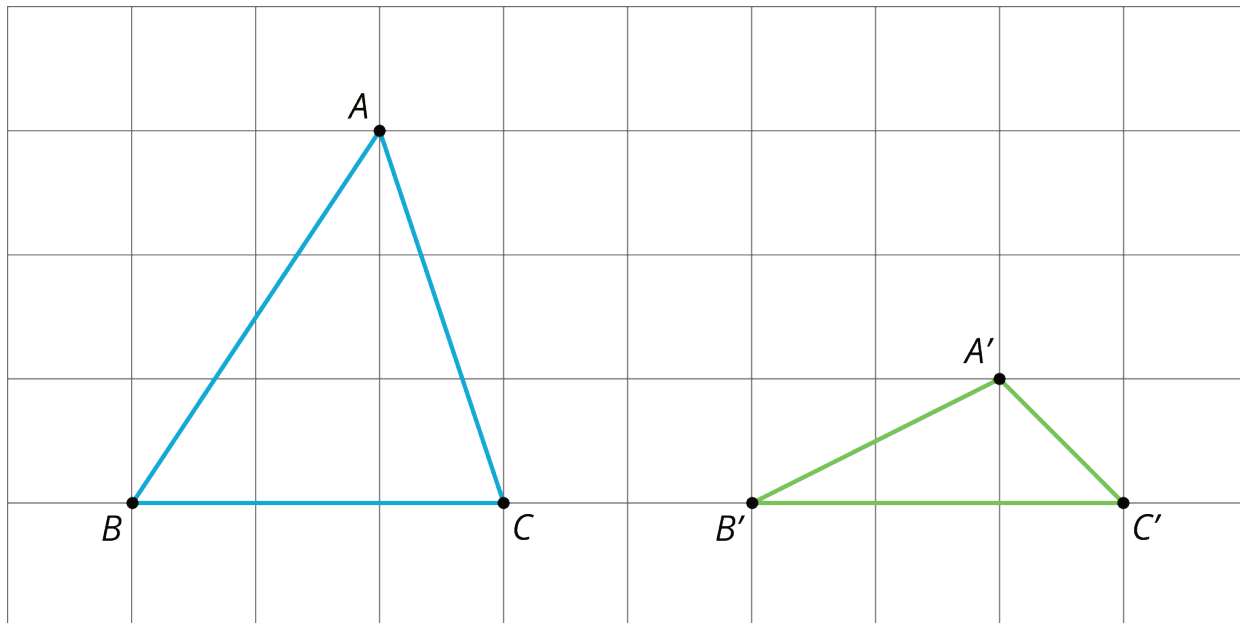
30°

B

90°

R

60°

3. Reflect Pentagon C across line ℓ.
   a. In the image, write the length of each side, in grid units, next to the side. You may need to make your own ruler with tracing paper or a blank index card.

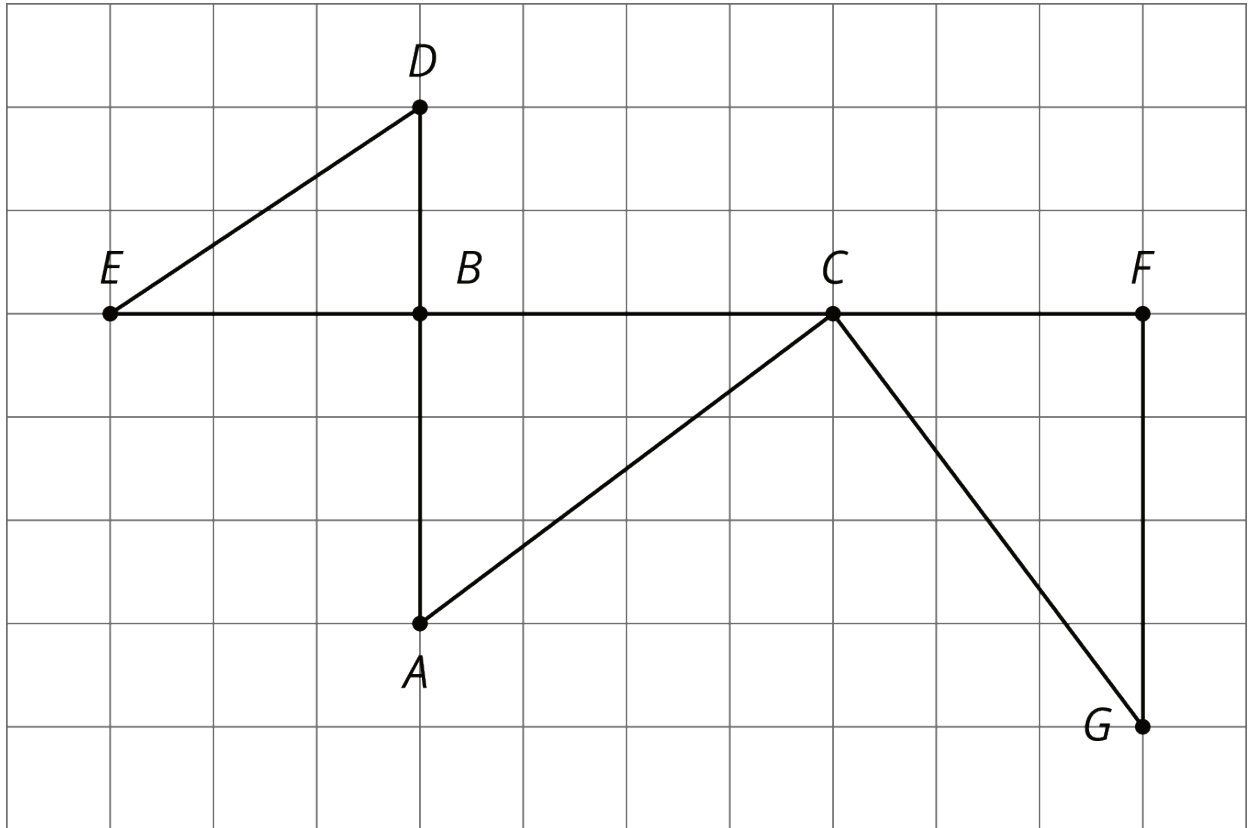   b. In the image, write the measure of each angle in the interior.
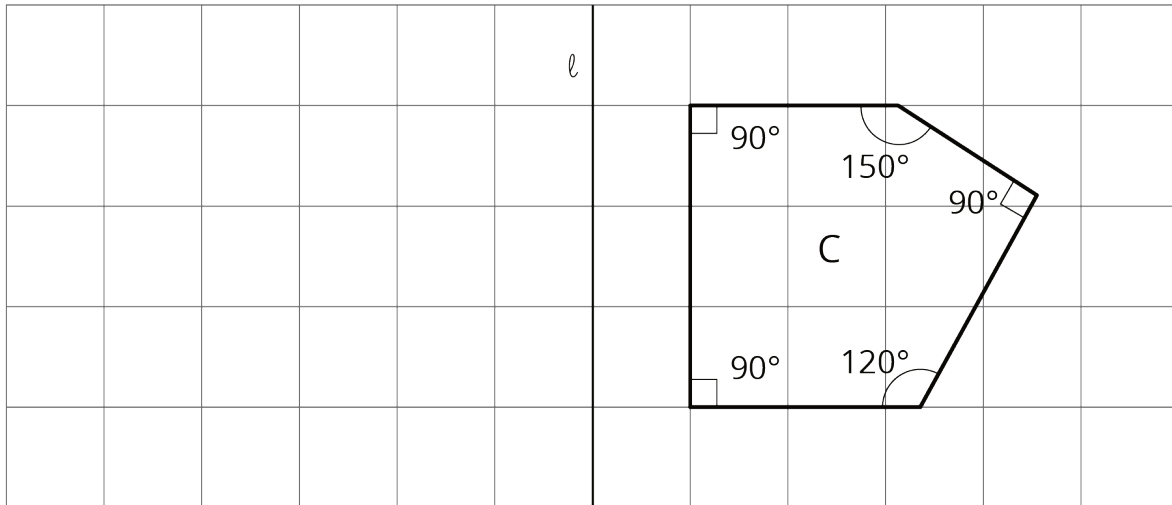
Activity Synthesis

3 Which One?

Student Task Statement

Here is a grid showing triangle ABC and two other triangles.

You can use a **rigid transformation** to take triangle ABC to *one* of the other triangles.

1. Which one? Explain how you know.

2. Describe a rigid transformation that takes ABC to the triangle you selected.