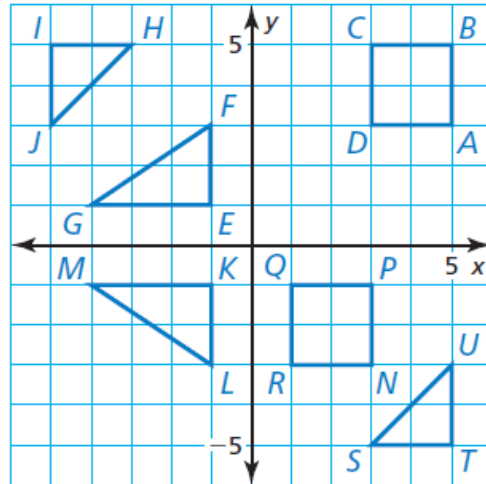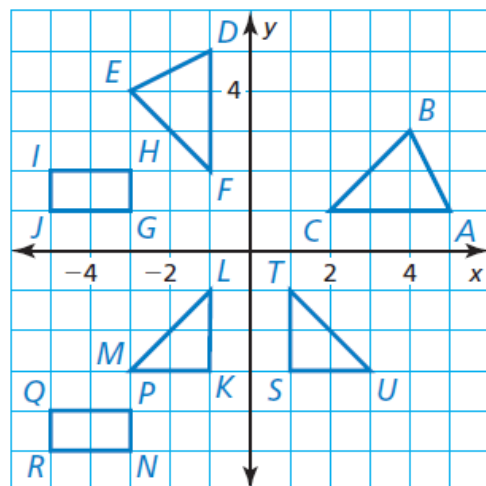# 4.4 Congruence and Transformations

## Essential Question

What transformations make two shapes congruent?
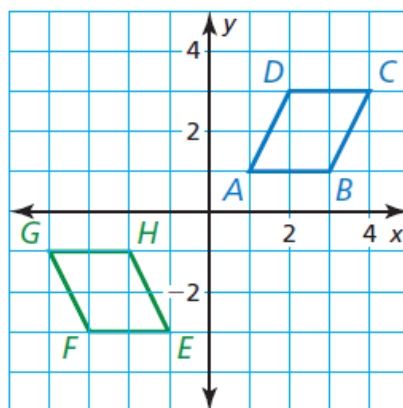


**1.** Identify any congruent figures in the coordinate plane. Explain.
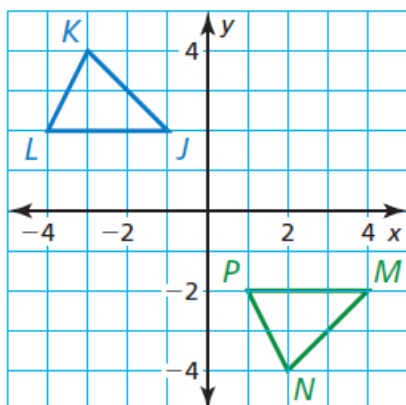
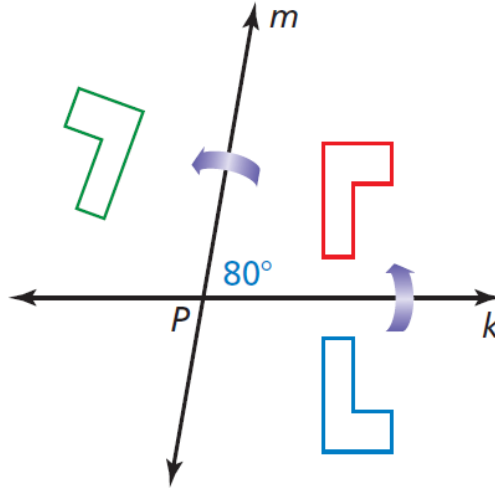Describe a congruence transformation that maps ▱*ABCD* to ▱*EFGH*.

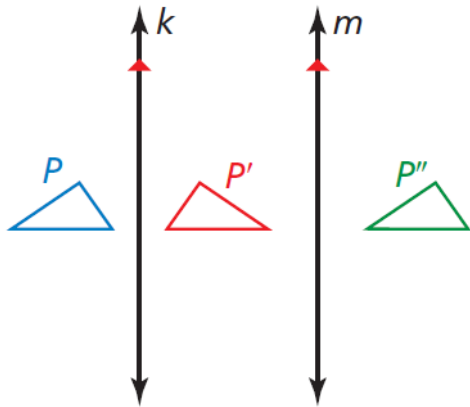**2.** In Example 2, describe another congruence transformation that maps ▱*ABCD* to ▱*EFGH*.

**3.** Describe a congruence transformation that maps △*JKL* to △*MNP*.

**Use the figure. The distance between line *k* and line *m* is 1.6 centimeters.**

**4.** The preimage is reflected in line *k*, then in line *m*. Describe a single transformation that maps the blue figure to the green figure.

Identify any congruent figures in the coordinate plane. Explain.