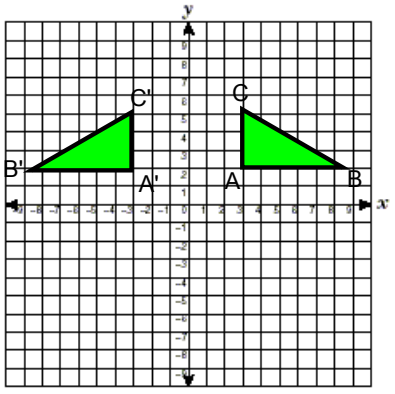
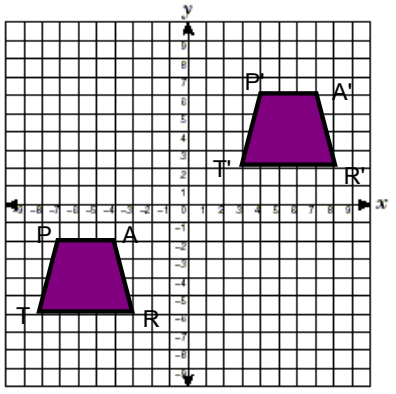
Independent Practice

In each example, identify the transformation and state if it is a rigid motion or not.



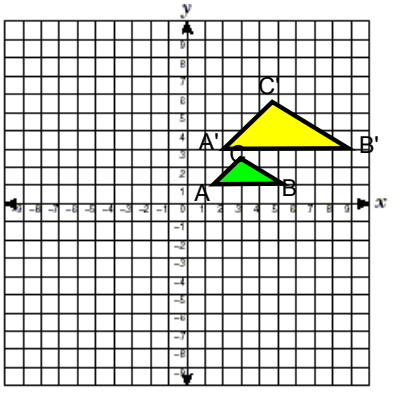
Transformation: Reflection

Is this a rigid motion? Yes



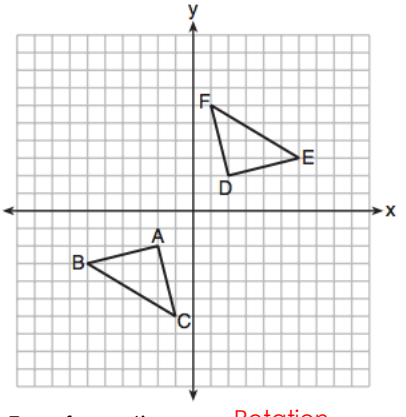
Transformation: Translation

Is this a rigid motion? Yes



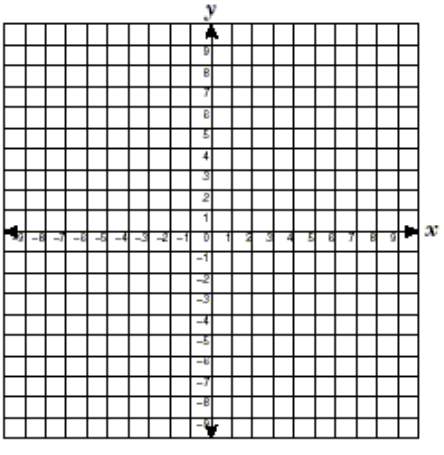
Transformation: Dilation

Is this a rigid motion? No



Transformation: Rotation

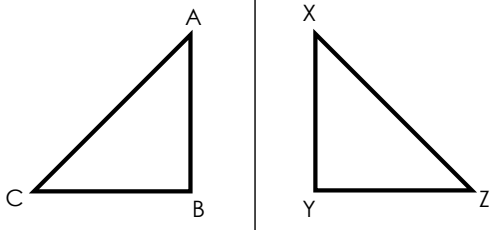
Is this a rigid motion? Yes



Draw an example of a rigid motion on the coordinate plane to the left.

Explain why your example is a rigid motion

Proving Congruence with Rigid Transformations

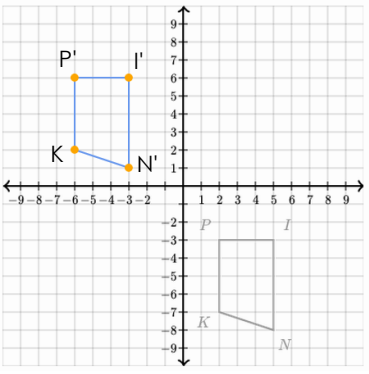


1. State the transformation that maps △ABC onto △XYZ

Reflection

2. Use the properties of rigid motions to explain why △ABC ≅ △XYZ

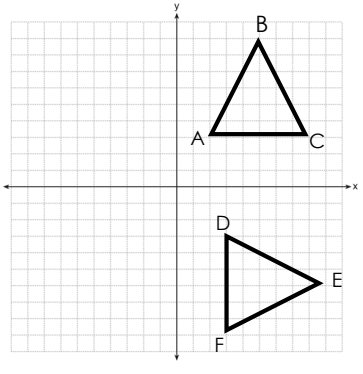
A reflection is a rigid motion and rigid motions preserves side lengths and angle measures



1. State the transformation that maps PINK onto P'I'N'K'

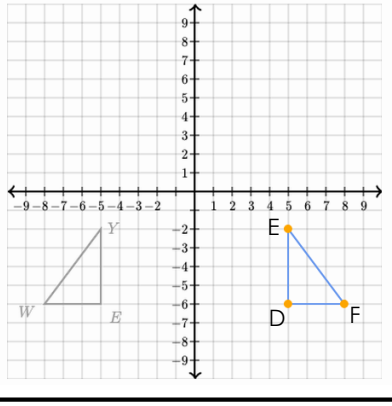
2. Explain why PINK is congruent to P'I'N'K' using the properties of rigid motions.

A translation is a rigid motion and rigid motions preserves side lengths and angle measures



△ABC and △DEF are graphed on the coordinate plane.
Use the properties of rigid motions to explain why △ABC ≅ △DEF

A rotation is a rigid motion and rigid motions preserves side lengths and angle measures



△YWE and △DEF are graphed on the coordinate plane.
Use the properties of rigid motions to explain why △YWE ≅ △DEF

A reflection is a rigid motion and rigid motions preserves side lengths and angle measures