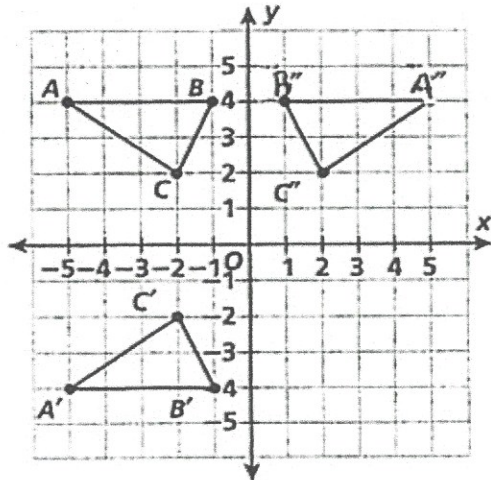


Identifying Sequences of Transformations

Directions: Identify the sequence of transformations from the original to the final image. Tell whether the two figures are similar (non-rigid) or congruent (rigid).

1)

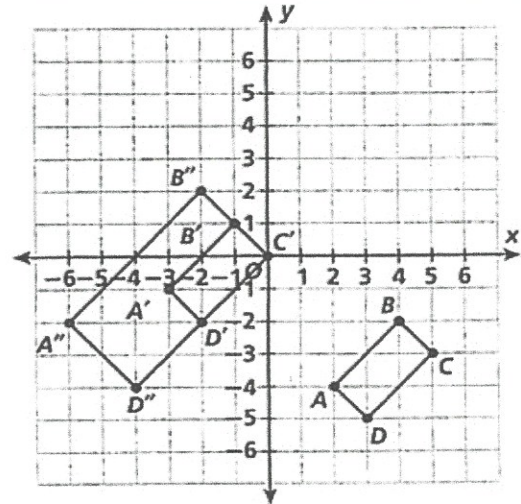


1. _____

2. _____

Circle: similar (non-rigid) or congruent (rigid)

2)

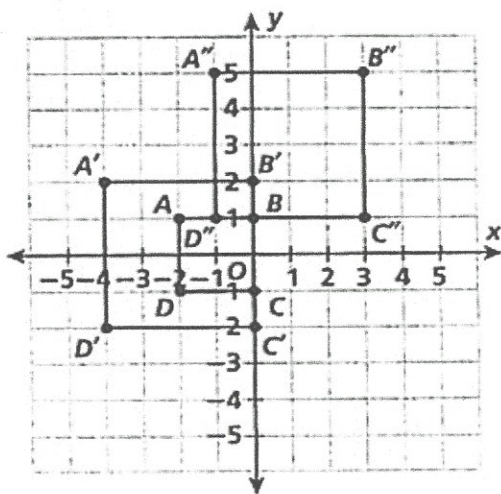


1. _____

2. _____

Circle: similar (non-rigid) or congruent (rigid)

3)

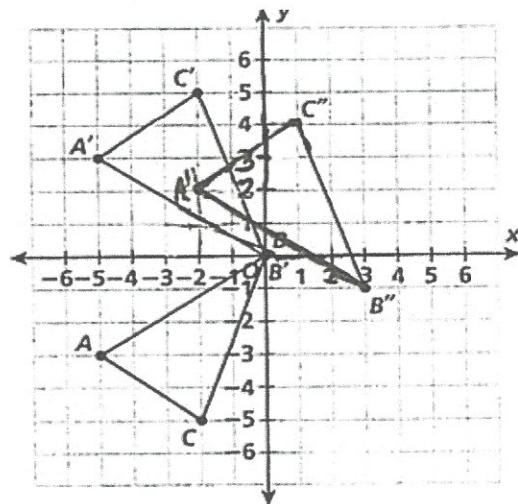


1. _____

2. _____

Circle: similar (non-rigid) or congruent (rigid)

4)



1. _____

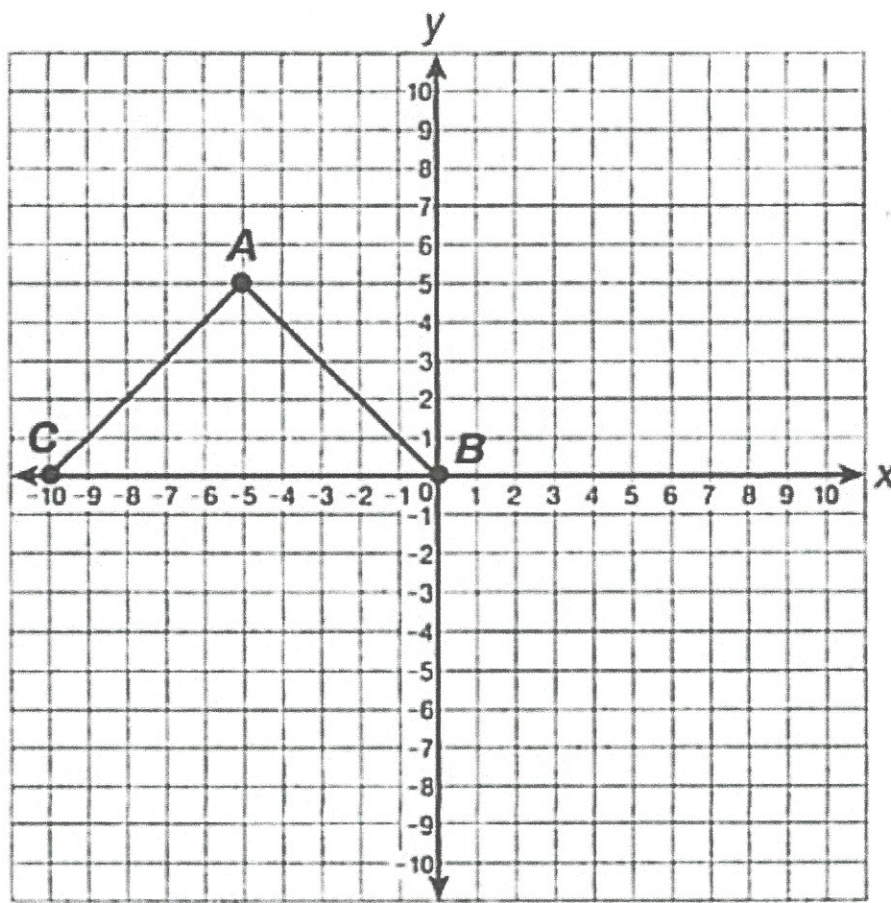
2. _____

Circle: similar (non-rigid) or congruent (rigid)

Directions: Draw a similar figure based on the given sequence of transformations. State the coordinates of the original and image.

5) Draw similar $\triangle DEF$ by dilating $\triangle ABC$ by $\frac{1}{5}$ and then translating the resulting image 7 units to the right.

$\triangle ABC$	$\triangle A'B'C'$	$\triangle DEF$
A(_____)	A'(_____)	D(_____)
B(_____)	B'(_____)	E(_____)
C(_____)	C'(_____)	F(_____)

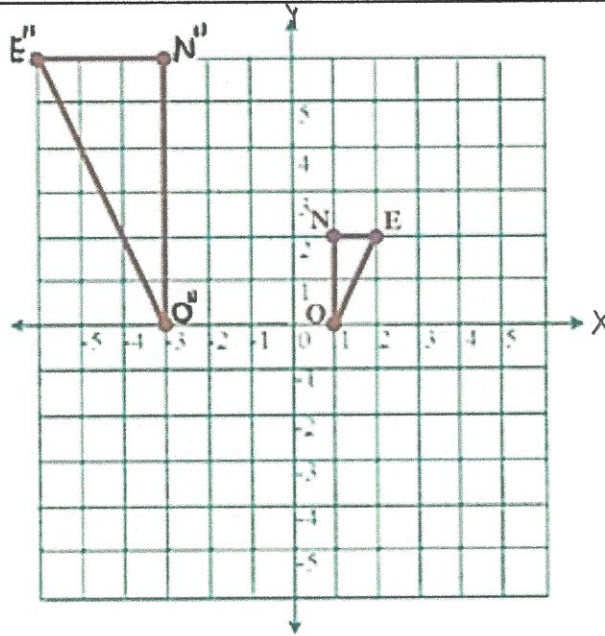


Directions: Describe a sequence of rigid and non-rigid motions that could be used to show that each pair of figures is similar. For each problem, assume that $\triangle ONE$ is the original and $\triangle O''N''E''$ is the image.

6) 1. _____

2. _____

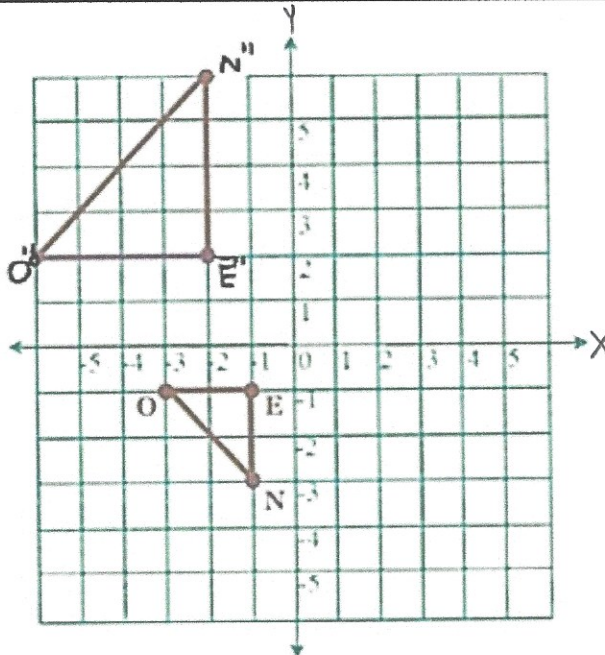
Circle: similar (non-rigid)
or congruent (rigid)



7) 1. _____

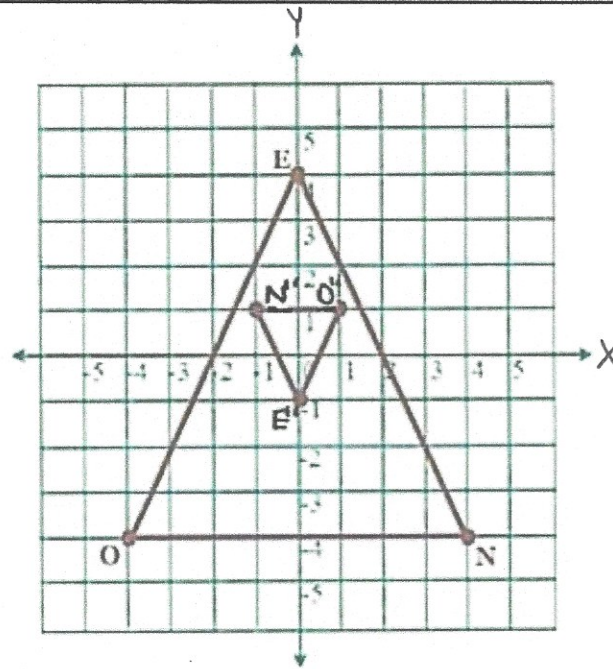
2. _____

Circle: similar (non-rigid)
or congruent (rigid)

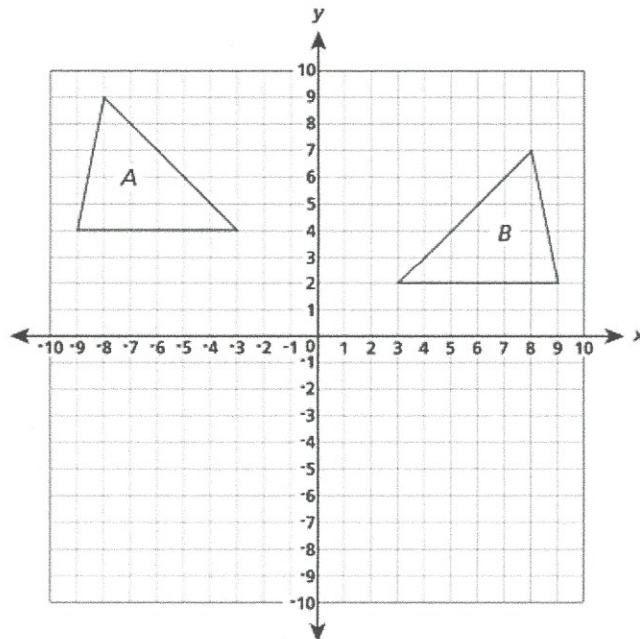


- 8) 1. _____
2. _____

Circle: similar (non-rigid)
or congruent (rigid)

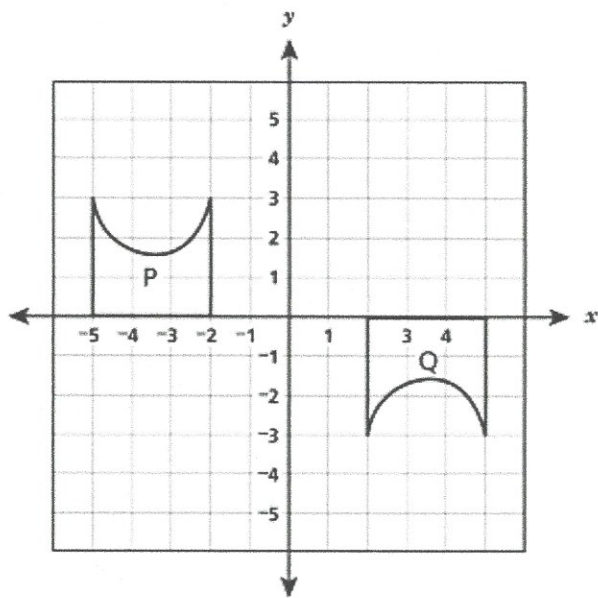


- 9) Which sequence of transformations takes ΔA to its image, ΔB ?



- Reflection over the x -axis and translation 2 units down.
- Reflection over the y -axis and translation 2 units down.
- Translation 2 units down and 90° rotation about the origin.
- Translation 12 units right and 90° rotation about the origin.

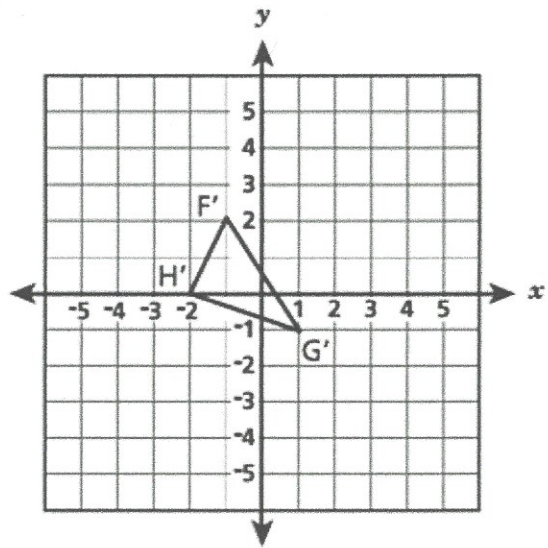
10) Figure Q was the result of a sequence of transformations on figure P, both shown below.



Which sequence of transformations could take figure P to figure Q?

- Reflection over the x -axis and translation 7 units right.
- Reflection over the y -axis and translation 3 units down.
- Translation 1 units right and 180° rotation about the origin.
- Translation 4 units right and 180° rotation about the origin.

11) The vertices of a triangle are located at $F(-4, -2)$, $G(2, 2)$, and $H(0, -4)$. A sequence of transformations to triangle FGH results in triangle $F'G'H'$ as shown below.



Which sequence of transformations to triangle FGH results in triangle $F'G'H'$?

- A 90° clockwise rotation about the origin, then a dilation by a scale factor of 2.
- A 90° counterclockwise rotation about the origin, then a dilation by a scale factor of 2.
- A 90° counterclockwise rotation about the origin, then a dilation by a scale factor of $\frac{1}{2}$.
- A 90° clockwise rotation about the origin, then a dilation by a scale factor of $\frac{1}{2}$.