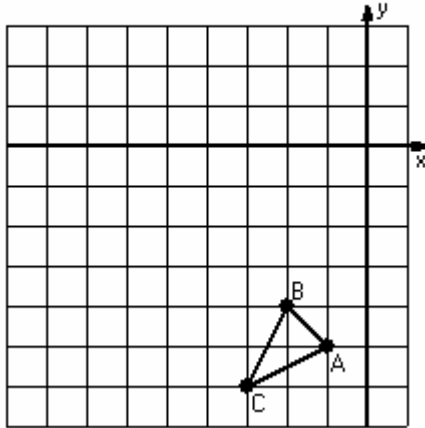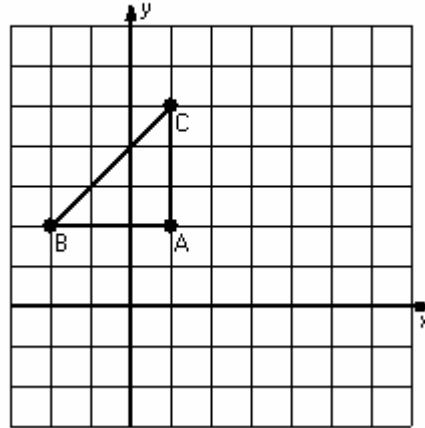# Three-Step Transformations

Instructions: Transform each triangle three times using the instructions in the order given.
Draw and label each transformation.
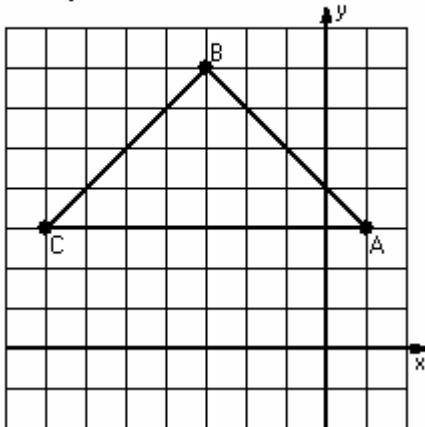
1) Translation (1,4)
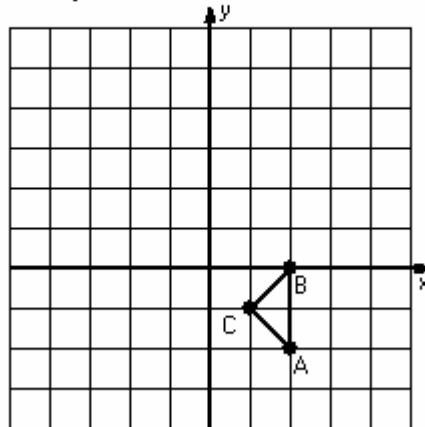   Reflection y = -3
   Rotation 180°, center R(-3,-2)

2) Dilation scale = 1/3, center D(4,2)
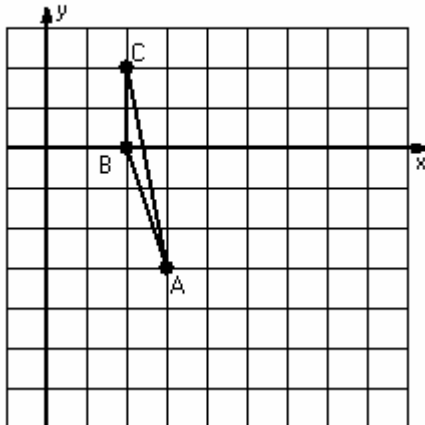   Reflection x = 1
   Translation (3,-2)

3) Dilation scale = 1/4, center D(-3,3)
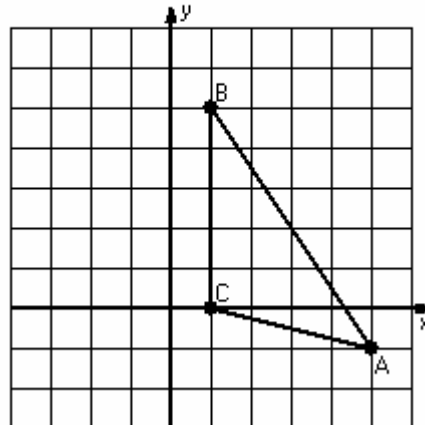   Translation (-3,-2)
   Reflection y = 3

4) Translation (-2,3)
   Rotation 90° counterclockwise, center R(2,0)
   Reflection y = 0

5) Translation (1,0)
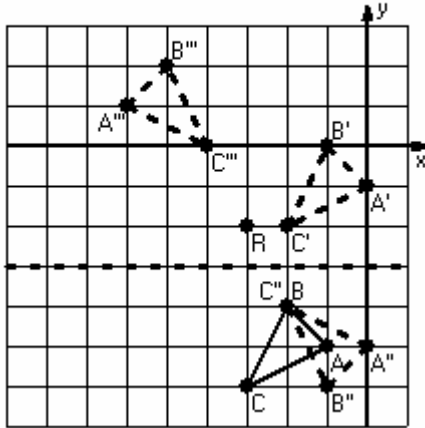   Rotation 180°, center R(2,-1)
   Reflection x = 4

6) Rotation 90° counterclockwise, center R(3,0)
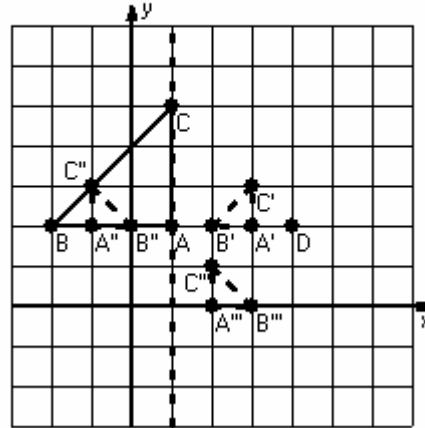   Translation (-1,4)
   Reflection x = 1

Three-Step Transformations Answer

Instructions: Transform each triangle three times using the instructions in the order given.
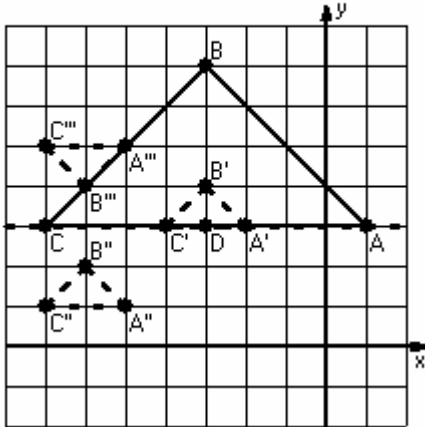Draw and label each transformation.

1) Translation (1,4)
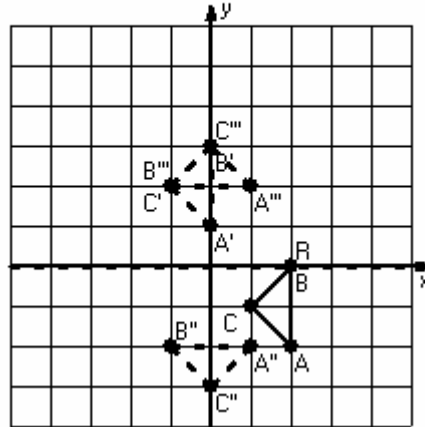Reflection y = -3
Rotation 180°, center R(-3,-2)

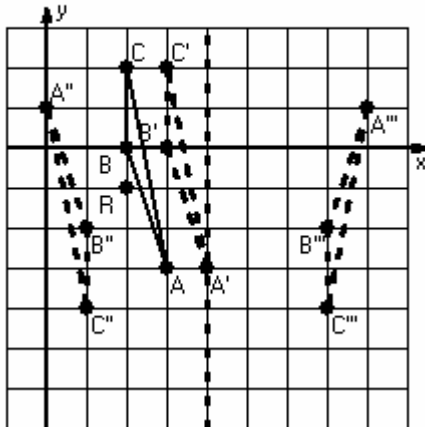**2)** Dilation scale = 1/3, center D(4,2)
Reflection x = 1
Translation (3,-2)

3) Dilation scale = 1/4, center D(-3,3)
Translation (-3,-2)
Reflection y = 3

4) Translation (-2,3)
Rotation 90° counterclockwise, center R(2,0)
Reflection y = 0

5) Translation (1,0)
Rotation 180°, center R(2,-1)
Reflection x = 4

6) Rotation 90° counterclockwise, center R(3,0)
Translation (-1,4)
Reflection x = 1

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