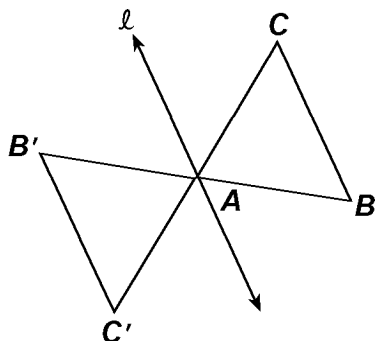Name: _____

CC Geometry

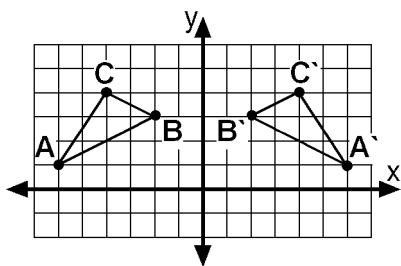## Intro to Transformations Homework

1) The transformation of $\triangle ABC$ to $\triangle AB'C'$ is shown in the accompanying diagram.


This transformation is an example of a _____.

A) line reflection in line ℓ
B) dilation
C) translation
D) rotation about point A

2) In the accompanying diagram, $\triangle A'B'C'$ is the image of $\triangle ABC$.

Which type of transformation is shown in the illustration?

A) line reflection   C) rotation
B) dilation   D) translation

3) If a translation maps point A(-3,1) to point A'(5,5), the translation can be represented by

A) $(x+8, y+6)$ C) $(x+2, y+6)$
B) $(x+2, y+4)$ D) $(x+8, y+4)$

4) What type of transformation is represented by the illustration below?

$A \longrightarrow$ **A**
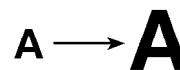
A) translation   C) dilation
B) rotation   D) reflection

5) If a point in quadrant *IV* is reflected in the y-axis, its image will lie in quadrant

A) *I*   C) *III*
B) *II*   D) *IV*

6) If $\triangle LNM$ is reflected across the y-axis, what will be the coordinates of point L', the image of point L?
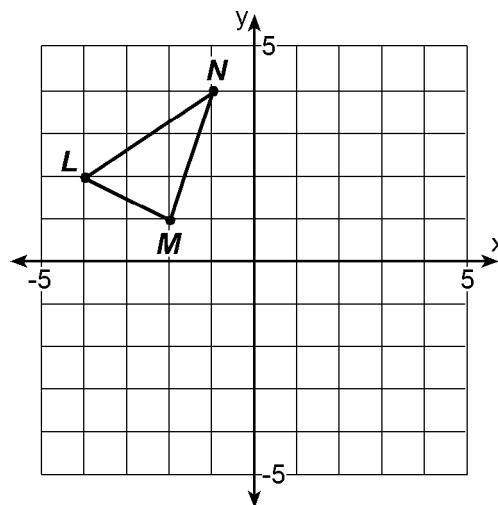
A) (-4,-2)   C) (4,2)
B) (1,4)   D) (2,1)

7) A rotation of a figure can be considered _____.

A) a mirror image of the figure
B) a slide of the figure
C) an enlargement or a reduction of the figure
D) a turning of the figure about some fixed point

8) In the accompanying diagram, ΔABC is a right triangle.

Which diagram below represents the image of ΔABC when rotated 90° counterclockwise about the origin?

A)

B)

C)

D)

9) Under what type of transformation can the image be a different size than the original figure?

A) rotation C) translation
B) reflection D) dilation

10) The translation $(x,y) \rightarrow (x - 2, y + 3)$ maps the point $(7,2)$ onto the point whose coordinates are

A) (5,5) C) (-14,6)
B) (5,-1) D) (9,5)

11) In the accompanying diagram, K is the image of A after a translation.

Under the same translation, which point is the image of J?

12) In the accompanying diagram, which triangle is the image of Δ2 after a reflection in the x-axis?

1) D   2) A   3) D   4) C   5) C

6) C   7) D   8) A   9) D   10) A

11)   F

12)   3