Geometry CC – Mr. Valentino

Unit 6 Lesson 6: Constructing Dilations

Name: _____

Date: _____ Period: _____

Do **Now**:

1. What transformation is shown in the graph?

2. How much is ΔABC enlarged by?
    Explain how you know.
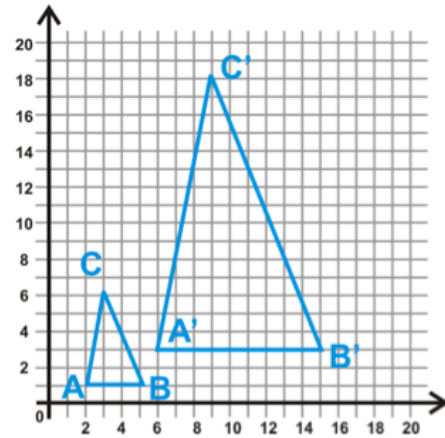
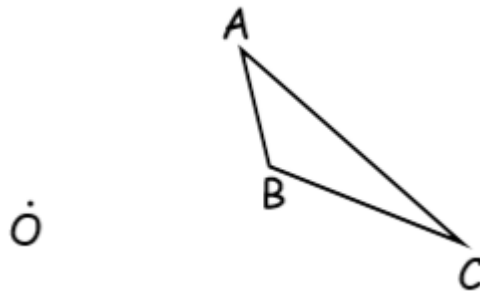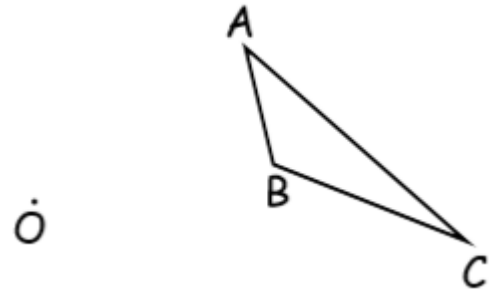## Dilating Images <u>off</u> the Coordinate Plane

1. Given center O and scale factor k=2, construct the image of ΔABC.
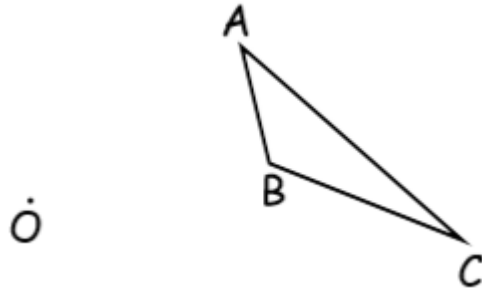
2. Given center O and scale factor k=1/2, construct the image of ΔABC.

3. How can we construct a Dilation with a negative scale factor? (ex. K = -2)
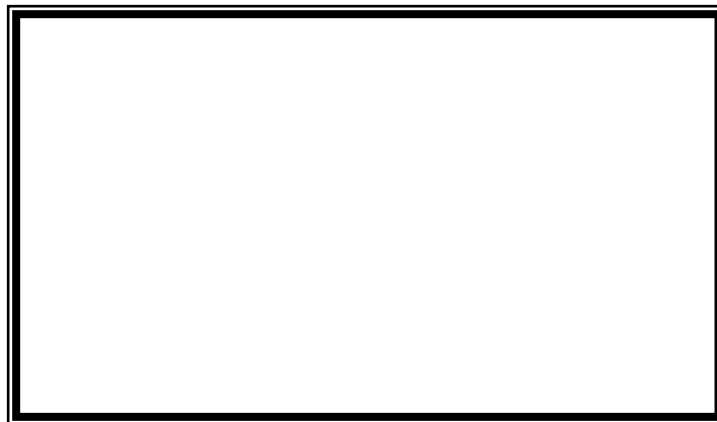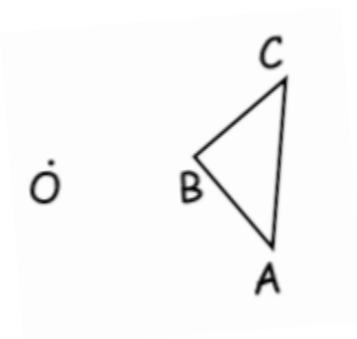
A

B

C

Ȯ

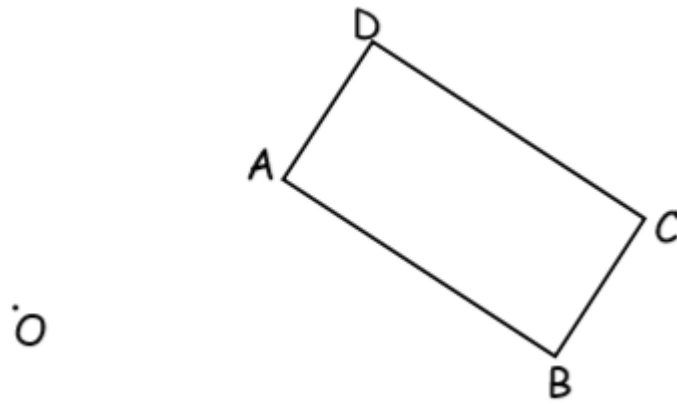Properties **Preserved** under a Dilation
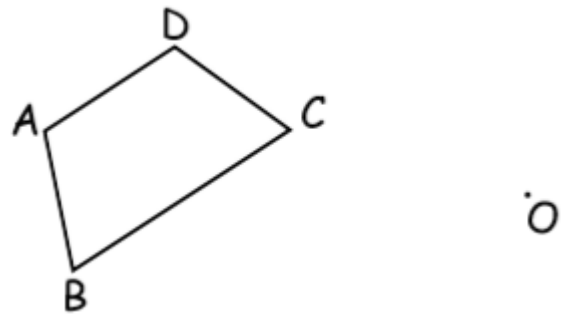
1. _____
2. _____
3. _____

✓

Not Preserved - _____

✗

1. Construct ΔABC after the transformation D_3. Label it A'B'C'.
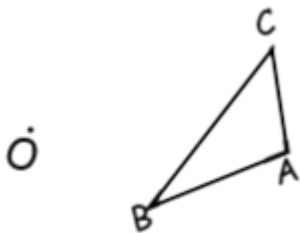
C

B

A

Ȯ

2. Construct ABCD after the transformation $D_{1/2}$. Label it A'B'C'D'.
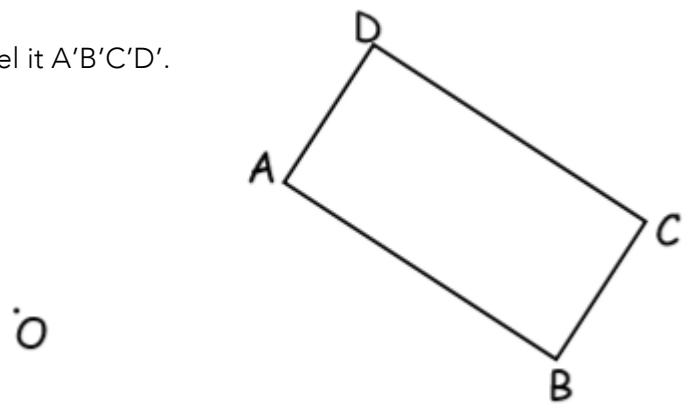

3. Construct ABCD after the transformation D_2. Label it A'B'C'D'.

4. Construct ΔABC after the transformation D_4. Label it A'B'C'.

5. Construct ABCD after the transformation D_{-1}. Label it A'B'C'D'.

6. Construct ΔABC after the transformation D_{-2}. Label it A'B'C'.
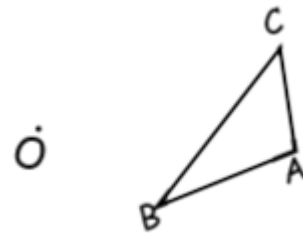
7. Construct ΔABC after the transformation $D_{-1/2}$. Label it A'B'C'.