Warm - up

Dilation Lab

Work with a partner to complete the lab. Answer all questions in complete sentences.

1. Graph Triangle ABC with vertices A(2,4), B(8,6), and C(10,12).
2. Find the coordinates for a dilation with a scale factor of $\frac{1}{2}$. Record.

3. On the same coordinate plane, graph Triangle A'B'C'.

4. Graph pentagon A (2,-5), B (2,-2), C (0,0), D (-2,-2), E (-2,-5).

5. Find the coordinates for a dilation with a scale factor of 2. Record.

6. On the same coordinate plane, graph Pentagon A'B'C'D'E'.

7. How do the dilated images compare to the original images?

8. Graph a dilation of Triangle ABC with a scale factor of 1. How do the two triangles compare?

******Bonus: Create your own image of 4 points and determine a scale factor to dilate your image. Plot both images on a coordinate plane as well as record your coordinates.***