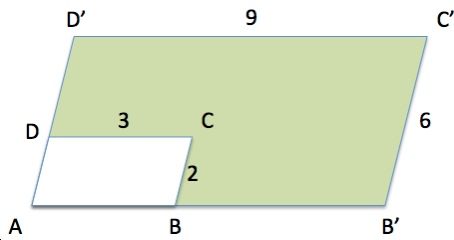


Unit 1 Day 4 HW

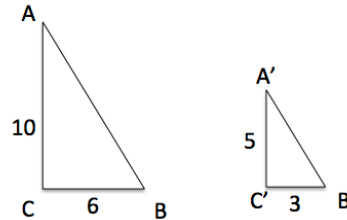
Name: _____

- Describe the transformation given by rule $(x, y) \rightarrow (3x, y)$. Is it an "Isometry"? Why or why not?
- Write an algebraic rule that would cause dilation by a factor of 3 and dilation by a factor of $1/2$.

3. Find the scale factor of the dilation that maps ABCD to A'B'C'D'.

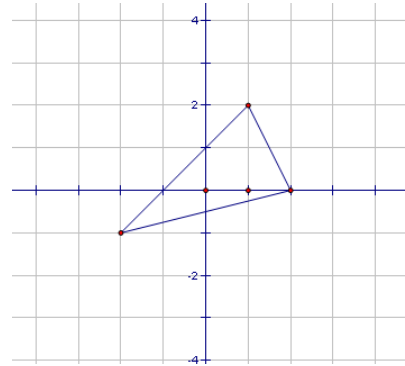


4. Find the scale factor of the dilation that maps ABC to A'B'C'.



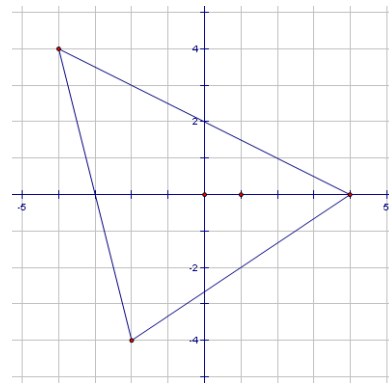
5. Graph the dilation of the object shown using a scale factor of 2.

Algebraic Rule:



6. Graph the dilation of the object shown using a scale factor of $1/2$.

Algebraic Rule:



Applications:

- The package for a model airplane states the scale is 1:63. The length of the model is 7.6 cm. What is the length of the actual airplane?
- Another model airplane states the scale is 1:96. The length of the real airplane is 48 feet. What is the length of the model?