2B-2

Similarity and Transformations

Apply the dilation *D* to the polygon with the given vertices. Describe the dilation as an enlargement or a reduction.

|  |  |
| --- | --- |
|  1. D: (x, y) → (2x, 2y) A(1, 2), B(3, 3), C(4, 1) BUGE11SE_C07_L02A_T01A’ \_\_\_\_\_\_\_\_\_B’ \_\_\_\_\_\_\_\_\_C’ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  2. D: (x, y) → (x, y) P(6, 8), Q(0, 6), R( –4, 2) BUGE11SE_C07_L02A_T03P’ \_\_\_\_\_\_\_\_\_Q’ \_\_\_\_\_\_\_\_\_R’ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  3. D: (x, y) → (1.5x, 1.5y) G(4, 1), H(2, 1), J(2, 6), K(4, 6) BUGE11SE_C07_L02A_T05G’ \_\_\_\_\_\_\_\_\_H’ \_\_\_\_\_\_\_\_\_J’ \_\_\_\_\_\_\_\_\_K’ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  4. D: (x, y) → (0.75x, 0.75y) E(4, 6), F(2, 2), G(4, 2), H (4, 4) BUGE11SE_C07_L02A_T07E’ \_\_\_\_\_\_\_\_\_F’ \_\_\_\_\_\_\_\_\_G’ \_\_\_\_\_\_\_\_\_H’ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

![Description: [image]]()

SIMILARITY OF DIFFERENT SHAPES:

Squares? YES or NO Rectangles? YES or NO

Equilateral Triangle? YES or NO Isosceles Triangle? YES or NO

 Circles? YES or NO

**Standard MCC9-12.G.SRT.1**:

A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.

Highlight and  . Are they parallel? Highlight  and  . Are they parallel?

 



What if the center of the dilation passes through one of the sides of the triangle? Draw a dilation with a factor of 2 to see what happens. Center of Dilation is (0,0). Are ALL corresponding sides parallel? Are some sides on the same line?



Delta Math Assignment: Dilation/Scale Factor