

Dilating Monsters

G.SRT.1a

Using a compass, pick enough key points on the given picture to dilate the picture by the given scale factor.

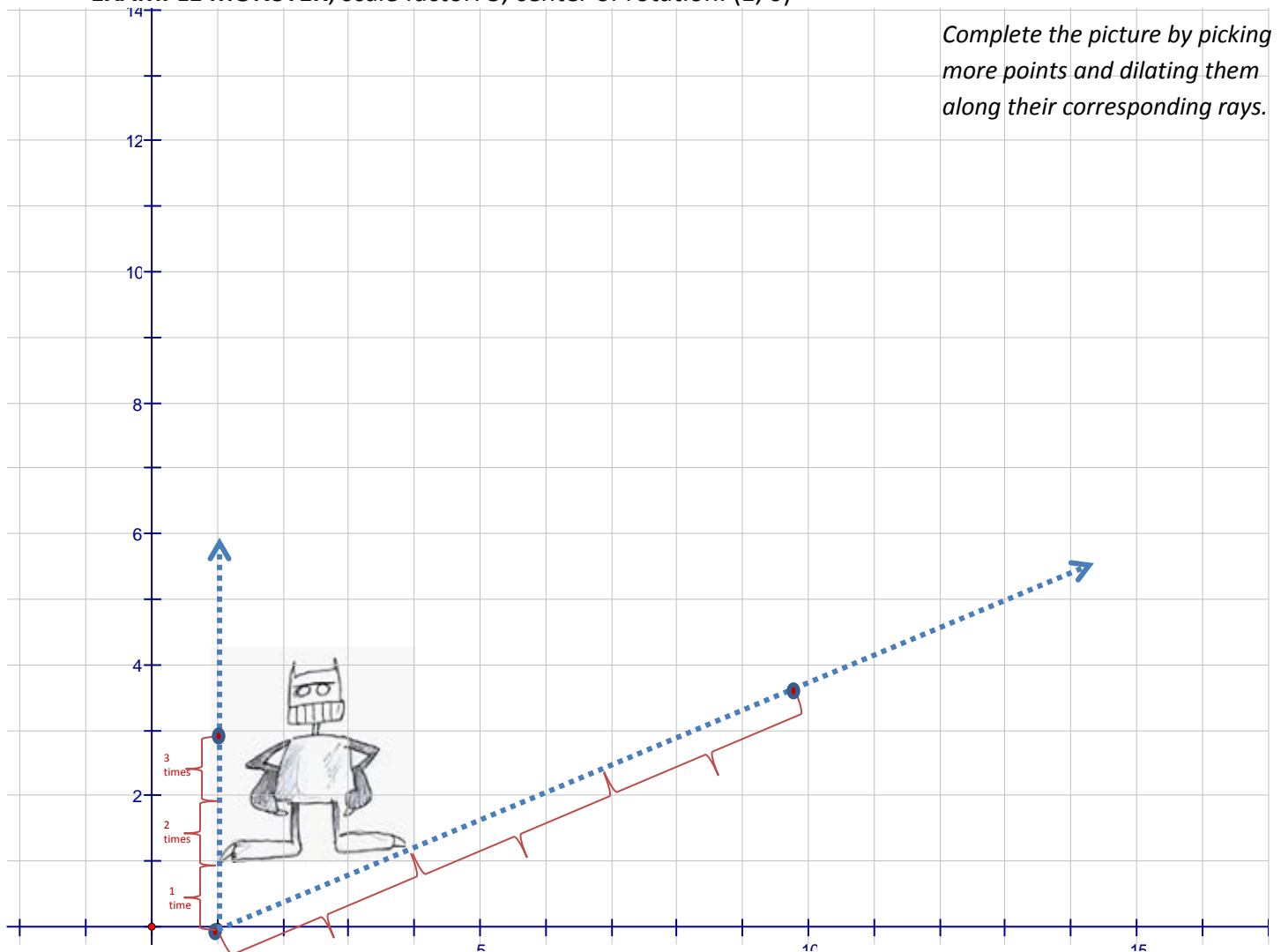
For each key point:

- Lightly sketch a ray connecting the center and the key point.
- The distance from the center to the key point is considered 1 measure. (*scale factor = 1*)
- Measure the distance from the center of dilation to each key point on the pre-image.
- Mark off the remaining lengths along that ray.

Graph enough key points so that you can sketch the completed picture then color in the scaled copy.

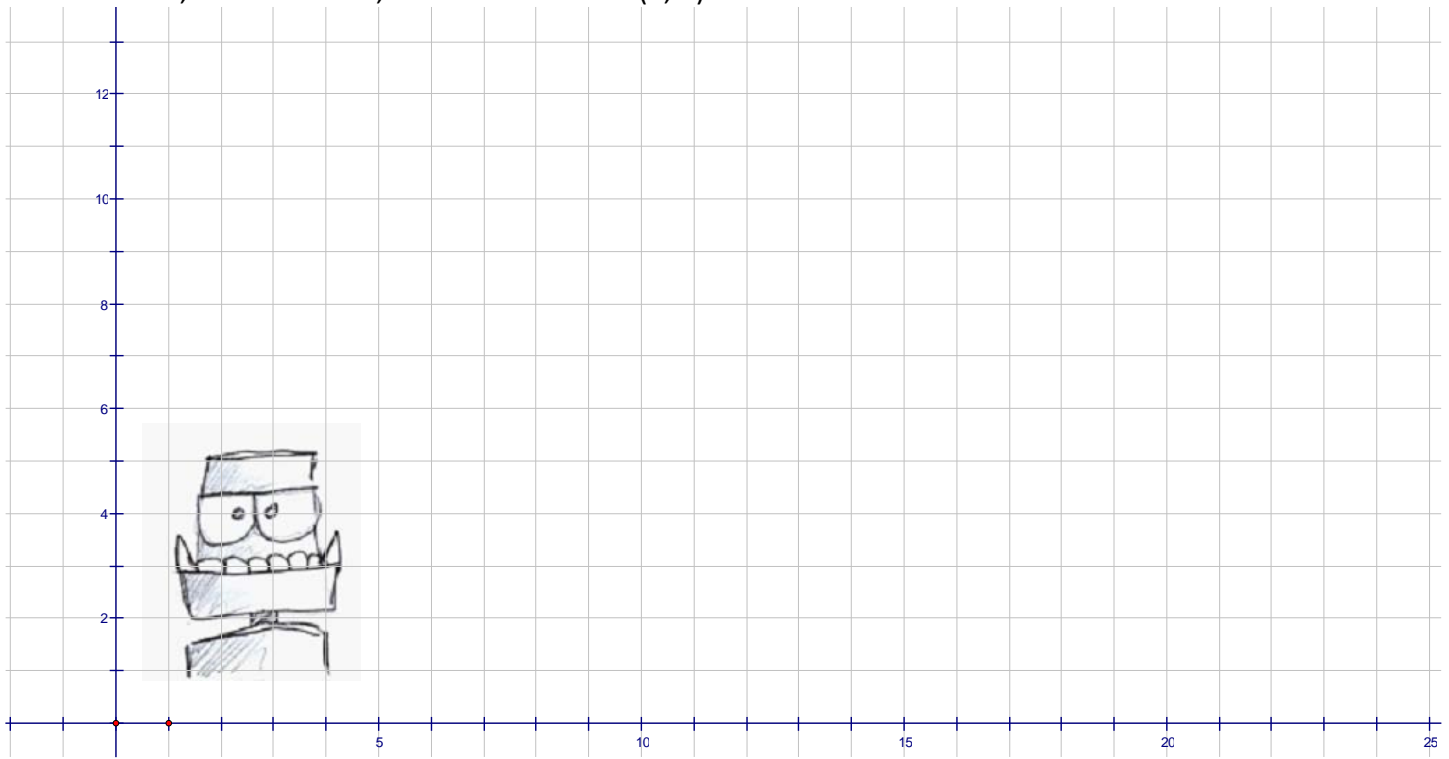
Here’s an example that has been started:

EXAMPLE MONSTER, scale factor: 3, center of rotation: (1, 0)



Perform the following dilations:

MONSTER #1, scale factor: 2, center of rotation: (0, 1)



Brainstorm: What construction would be needed to complete dilation with a scale factor of $\frac{1}{2}$?

MONSTER #2, scale factor: 0.5, center of rotation: (0, 0)

