# Dilations: Question 36

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The first step is to get the scale factor. To do this, we will look at RS and R'S' .

$$R(1,2), S(1,1), R'(3,6), S'(3,3) \tag{1}$$
$$RS = 1 \tag{2}$$
$$R'S' = 3 \tag{3}$$
$$K = \frac{3}{1} = 3 \tag{4}$$

To test whether or not the dilation is centered at the origin, we can simply take one point from the pre image such as R and multiply the x and y values by the scale factor.

$$D_{O,3} \rightarrow R(1,2) = (3,6) \tag{5}$$
$$D_{0,3} = R' \tag{6}$$

The dilation that can be mapped from RST to R'S'T' is $D_{O,3}$ .