

## Dilations: Question 19

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In order to prove that the dilation takes a line passing through the center of the dilation to the same line, we must first visualize the image with respect to the pre-image after the dilation has been performed.

$$A(-2, 2), B(1, 2), C(1, -1) \quad (1)$$

$$D_{O, 2.5} \rightarrow A, B, C = A'(-5, 5), B'(\frac{5}{2}, 5), C'(\frac{5}{2}, -\frac{5}{2}) \quad (2)$$

The graphic is shown below.

Figure 1: Pre Image and Image of Triangle