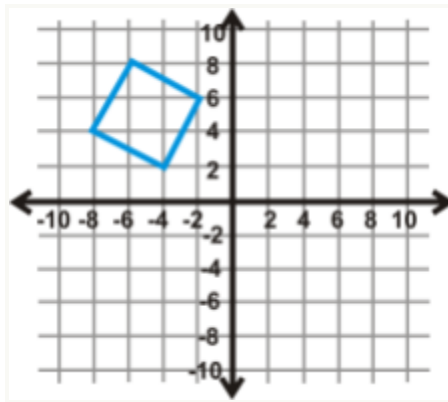


Extra Practice: Composite Transformations

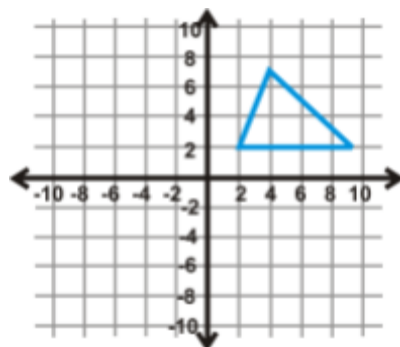
1. $\triangle DEF$ has vertices $D(3, -1)$, $E(8, -3)$ and $F(6, 4)$. Reflect $\triangle DEF$ over $x = -5$ and $x = 1$. This double reflection would be the same as which one translation?
2. Reflect $\triangle DEF$ from problem #1 over the x -axis, followed by the y -axis. Determine the coordinates of $\triangle D''E''F''$. This double reflection is the same as what rotation?
3. Graph image below after a composition of transformations

- Reflection: over the x -axis
- Translation: $(x, y) \rightarrow (x + 6, y)$



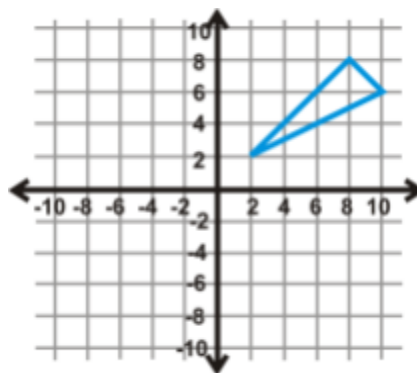
4. Graph image below after a composition of transformations

- Rotation: 90°
- Reflection: over the line $y = x$

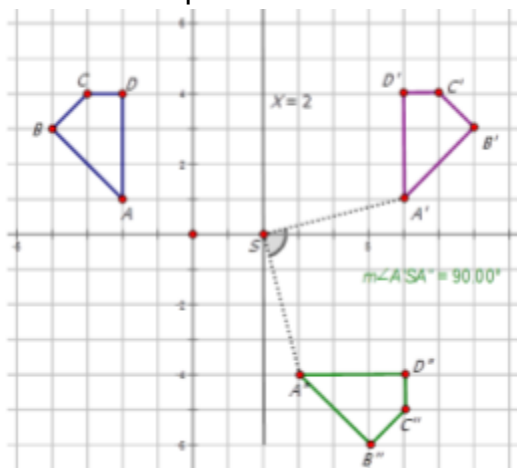


5. Graph image below after a composition of transformations

- Dilation: $(x, y) \rightarrow (2x, 2y)$
- Translation: $(x, y) \rightarrow (x - 6, y - 5)$



6. Describe the composite transformations in the diagram below and write the notation to represent the transformation of figure $ABCD$ to $A''B''C''D''$.



7. Describe the composite transformations in the diagram below and write the notation to represent the transformation of figure $\triangle ABC$ to $\triangle A''B''C''$.

