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| **Reflecting and Rotating 2-D Shapes on a Cartesian Plane** | | | |
| Reflects a point in the  *x*-axis, in the *y*-axis, and in a diagonal line    P’ is the image of P after a reflection in the *x*-axis. P’’ is the image of P after a reflection in the *y*-axis. P’’’ is the image of P after a reflection in a diagonal line through the origin. | Reflects a shape and relates the vertices of each image to the shape      ΔA’B’C’ is the image of ΔABC after a reflection in the *x*-axis. ΔA’’B’’C’’ is the image of ΔABC after a reflection in the *y*-axis. ΔA’’’B’’’C’’’ is the image of ΔABC after a reflection in a diagonal line through the origin.  Each vertex of the image is the same distance from the reflection line as its corresponding vertex on the shape. | Rotates a shape about a vertex    ΔAB’C’ is the image of ΔABC after a clockwise rotation of 90⁰ about vertex A. | Rotates a shape about a point outside the shape      ΔP’Q’R’ is the image of ΔPQR after a rotation of 180⁰ about point T. |

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| **Observations/Documentation** | | | |
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