Name:
Date:
The arrow undergoes a dilation with a scale factor of $1 / 2$.
The center of dilation is the origin.

1. Complete the table to find the vertices of the image
2. Draw the image and label the vertices


| Preimage <br> $(\mathbf{x}, \mathbf{y})$ |  |  | Image <br> $(1 / 2 \mathbf{x}, 1 / 2 \mathbf{y})$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $A$ |  | $A^{\prime}$ |  |  |
| $B$ |  | $B^{\prime}$ |  |  |
| $C$ |  | $C^{\prime}$ |  |  |
| $D$ |  | $D^{\prime}$ |  |  |
| $E$ |  | $E^{\prime}$ |  |  |
| $F$ |  | $F^{\prime}$ |  |  |
| $G$ |  | $G^{\prime}$ |  |  |

The figure undergoes a dilation with a scale factor of 3.
The center of dilation is the origin.

1. Complete the table to find the vertices of the image
2. Draw the image and label the vertices


| Preimage <br> $(\mathbf{x}, \mathbf{y})$ |  |  | Image <br> $(3 \mathbf{x , 3 y})$ |
| :---: | :---: | :---: | :---: |
| $A$ |  | $A^{\prime}$ |  |
| $B$ |  | $B^{\prime}$ |  |
| $C$ |  | $C^{\prime}$ |  |
| $D$ |  | $D^{\prime}$ |  |
| $E$ |  | $E^{\prime}$ |  |
| $F$ |  | $F^{\prime}$ |  |

