

Here are our graphics



Rotated graphic =
$$\begin{pmatrix} 0.707 & 0.707 & 0.000 \\ -0.707 & 0.707 & 0.000 \\ 0.000 & 0.000 & 1.000 \end{pmatrix}$$

Non-uniformly scaled graphic =
$$\begin{pmatrix} 1.500 & 0.000 & 0.000 \\ 0.000 & 2.000 & 0.000 \\ 0.000 & 0.000 & 1.000 \end{pmatrix}$$

Rotation \times scale =
$$\begin{pmatrix} 1.061 & 1.414 & 0.000 \\ -1.061 & 1.414 & 0.000 \\ 0.000 & 0.000 & 1.000 \end{pmatrix}$$

Rotation \times scale \times translate =
$$\begin{pmatrix} 1.061 & 1.414 & 0.000 \\ -1.061 & 1.414 & 0.000 \\ 15.000 & 15.000 & 1.000 \end{pmatrix}$$