

## *Additional Activities: Think-Share-Pair-Compare 2.7*

1. Revisit <https://www.geogebra.org/m/kharvug8> or imagine the figure as a circle centered at the origin and  $N$  attached. Can we represent a translation of this figure as a  $2 \times 2$  matrix? Respond on our usual pollev if you have tech:
  - a) yes
  - b) no
2. Can we represent rotation about a point other than the origin as a  $2 \times 2$  matrix representation?
3. On a board (1 per group), sketch standard mathematical axes in 3D, a figure with length, width and depth, and then outputs of the figure for the 3D linear transformations of dilation, projection onto a plane, reflection and rotation.
4. For the last 2 transformations, what is fixed?
5. Lastly, review 2.7 fill-in guide items, look at or work on upcoming items, or chat until I bring us back together