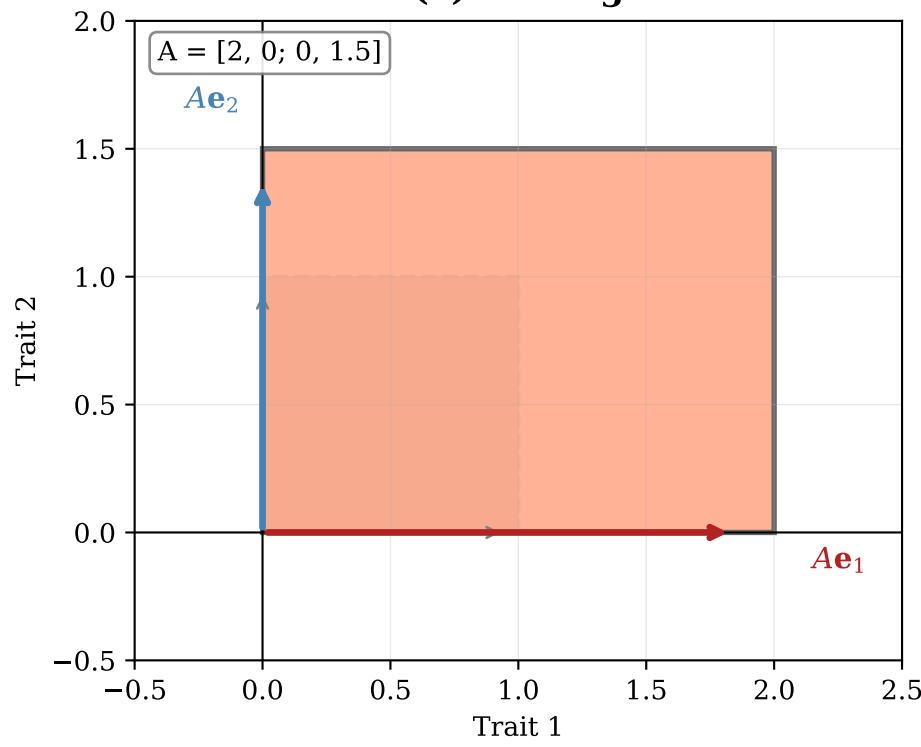


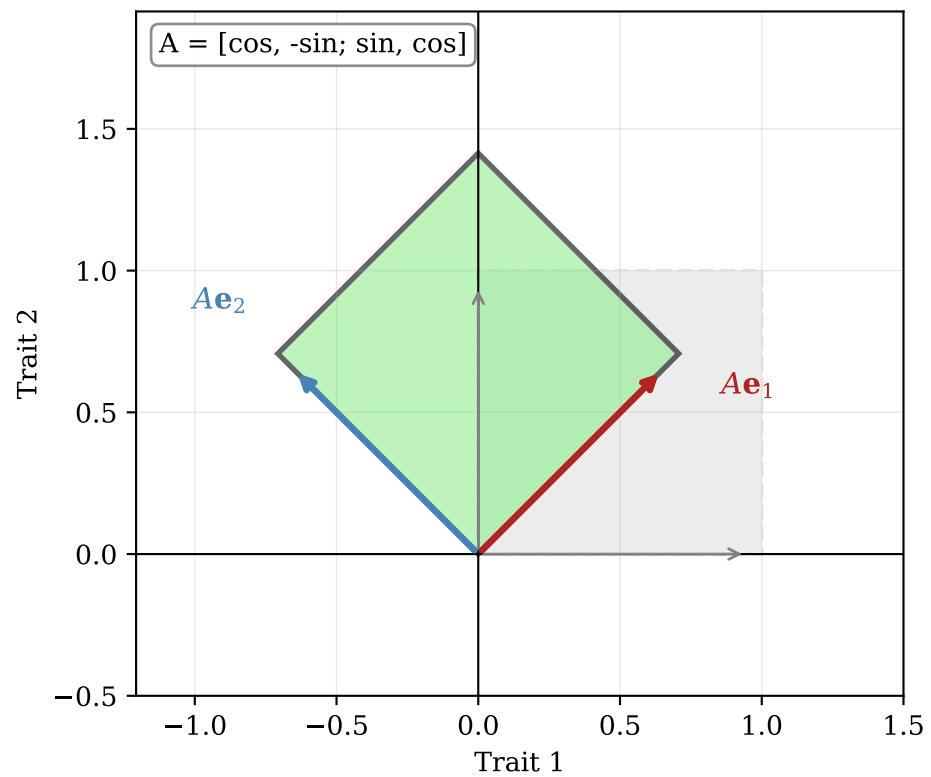
# The Four Basic Linear Transformations

Unit square (dashed gray)  $\rightarrow$  transformed shape (solid). Red/blue arrows show where  $e_1$  and  $e_2$  land.

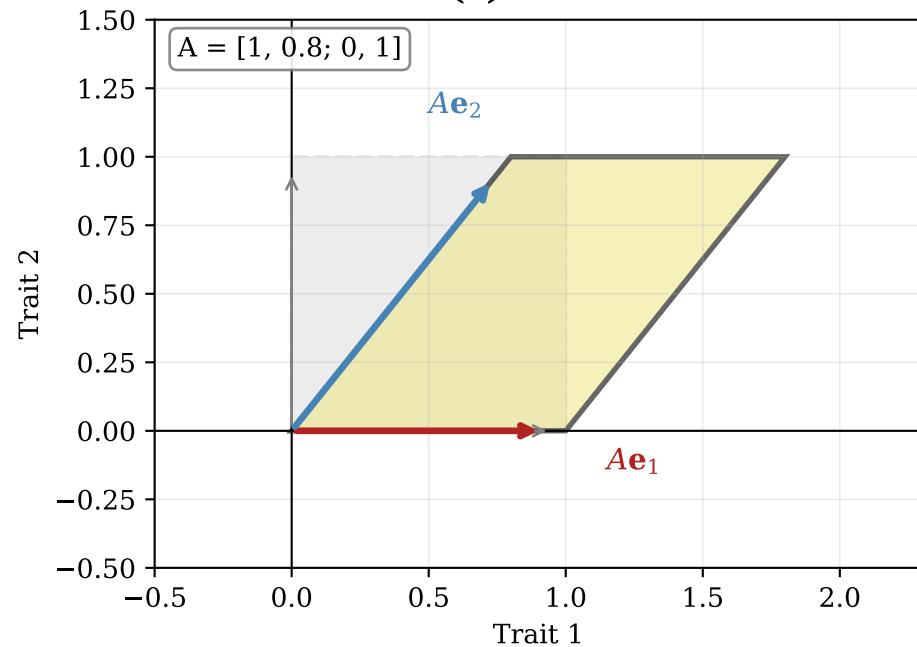
**(a) Scaling**



**(b) Rotation (45°)**



**(c) Shear**



**(d) Reflection**

