

$$A = \begin{bmatrix} a_{1}, x & a_{2}, x \\ a_{1}, y & a_{2}, y \end{bmatrix} = \begin{bmatrix} 1.00 & 0.50 \\ 0.50 & 1.00 \end{bmatrix}$$

$$v = \begin{bmatrix} 2.00 \\ 3.00 \end{bmatrix}$$

$$\mathbf{Av} = \begin{bmatrix} 3.50 \\ 4.00 \end{bmatrix}$$