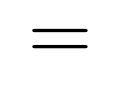
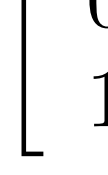
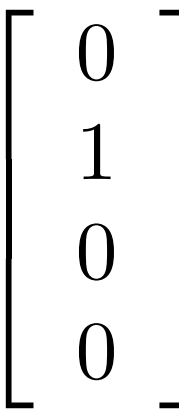
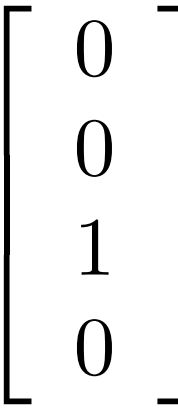


0

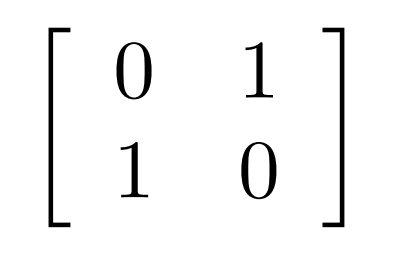
1

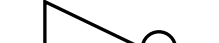




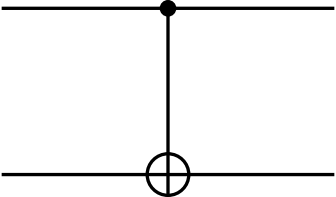


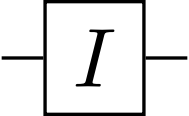
$$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 1 \end{bmatrix}$$





$$\begin{bmatrix} 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$



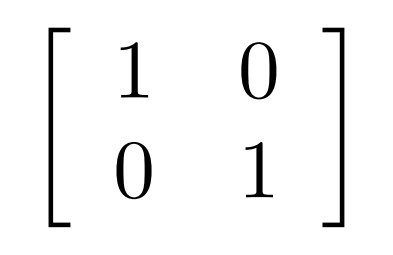

I

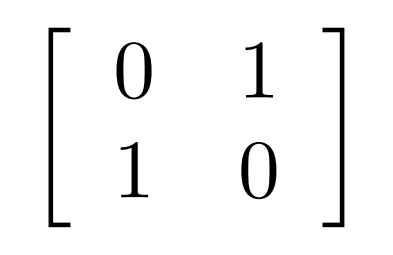
X

Y

Z

H





$$\begin{bmatrix} 0 & -i \\ i & 0 \end{bmatrix}$$

$$\begin{bmatrix} 1 & 0 \\ 0 & -1 \end{bmatrix}$$

$$\frac{1}{\sqrt{2}} \begin{bmatrix} 1 & 2 \\ 1 & -1 \end{bmatrix}$$