

1. Compute $\rho_{\begin{bmatrix} -2 \\ 0 \end{bmatrix}, \frac{\pi}{2}} \rho_{\begin{bmatrix} 0 \\ 2 \end{bmatrix}, \frac{\pi}{2}}$ explicitly.
2. Compute $\rho_{\begin{bmatrix} 0 \\ -2 \end{bmatrix}, \frac{2\pi}{3}} \rho_{0, -\frac{2\pi}{3}}$ explicitly.
3. Compute $\rho_{0, \pi} \tau_{\begin{bmatrix} -2 \\ 2 \end{bmatrix}}$ explicitly.
4. Let ℓ be the line $y = 0$ (the x -axis), m the line $y = \frac{1}{\sqrt{3}}x$, and n the line $y = \sqrt{3}x$. Compute $\sigma_n \sigma_m \sigma_\ell$ explicitly.
5. Let ℓ be the line $y = -x - 2$. Compute $\sigma_\ell \rho_{0, \frac{3\pi}{2}}$ explicitly.