Example 1. Let $\mathbf{v} = \langle -1, 0, 3 \rangle$ and $\mathbf{w} = \langle 2, -1, 4 \rangle$. Compute $\mathbf{v} \times \mathbf{w}$.

Example 2. Find a unit vector which is orthogonal to the plane containing the points $P(1, 3, 2)$, $Q(2, -1, 0)$, and $R(7, 0, -2)$.
