11.6 #3

$\vec{n}_1 = \langle 3, -2, 1 \rangle \perp$ plane P_1

$\vec{n}_2 = \langle 5, 1, -6 \rangle \perp$ plane P_2

$\vec{n}_1$ is not a scalar multiple of $\vec{n}_2$ so $\vec{n}_1 \not\parallel \vec{n}_2$

$\vec{n}_1 \cdot \vec{n}_2 = 15 - 2 - 6 = 7 \neq 0$, so $\vec{n}_1 \not\perp \vec{n}_2$.

Since $\vec{n}_1$ and $\vec{n}_2$ are neither parallel nor orthogonal,

the planes P_1 and P_2 are neither parallel nor perpendicular.