

- ① Parametrize the plane containing $(1, 0, 1)$, $(2, 3, 4)$, and $(-1, 5, -6)$.
- ② Give a Cartesian equation for the same plane as ①.
- ③ We can rearrange $x + y + z = 5$ as $0 = 1(x - 0) + 1(y - 0) + 1(z - 5)$ to see that $x + y + z = 5$ describes the plane containing $(0, 0, 5)$ & \perp to $\langle 1, 1, 1 \rangle$.
Use an analogous trick to find a vector perpendicular to the plane $3x - 4z = 1$.