1. (6 points) Find the intersection of the planes $x + (y - 1) + z = 0$ and $-x + (y + 1) - z = 0$.

2. (6 points) Find an equation for the plane containing the two parallel lines

$v_1 = (0, 1, -2) + t(2, 3, -1)$ and $v_2 = (2, -1, 0) + t(2, 3, -1)$.

3. (6 points) Sketch or describe the surface in $\mathbb{R}^3$ with the equation $\frac{x^4}{4} = \frac{y^2}{4} + \frac{z^2}{9}$. 