Exercise 1 *Find the point at which the line*

$$x = 2 \quad , \qquad y = 3 + 2t \quad , \quad z = -2 - 2t$$

meets the plane
$$6x + 3y - 4z = -12$$

.

Exercise 2 *Find parametrization for the line along which the planes*

$$x + 2y + z = 1 \qquad , \qquad x + y = 1$$

meet.

Exercise 3 *Find the distance from the point* $P(-1, 1, 1)$ *to the plane*

$$2x + y + 3z = 1$$