Example 1. (a) Find parametric equations for the line through $P(-2,0,4)$ and $Q(1,-1,3)$.
(b) Parametrize the line segment from $P$ to $Q$.

Example 2. Find an equation for the plane containing $P(1,2,7), Q(-2,1,6)$, and $R(3,3,5)$.

Example 3. Find parametric equations for the line of intersection of the two planes

$$
M: 2 x-y+4 z=4 \text { and } N: x+3 y-2 z=1
$$

