1. Describe the solution set of each echelelon form system. What is it, geometrically?

a)

$$\begin{aligned} x + y - z &= 5 \\ 2y + 3z &= 9 \\ 0 &= 0 \end{aligned}$$

b)

$$\begin{aligned} 2x - y + z + w &= 1 \\ -y + 2w &= -1 \\ 0 &= 0 \end{aligned}$$

2. Write the associated homogeneous systems for the systems in the prior question. Give the solution set.

3. The original systems had these solutions. Check that, and then use them in the description.

a) $(3, 3, 1)$

b) $(1, 3, 1, 1)$