Quiz 1

1. Solve the following homogeneous system and write the solution in parametric vector form.

\[
\begin{align*}
    x_1 + 3x_2 - 5x_3 &= 0 \\
    x_1 + 4x_2 - 8x_3 &= 0 \\
    -3x_1 - 7x_2 + 9x_3 &= 0
\end{align*}
\]

2. Solve the following system and write the solution in parametric vector form.

\[
\begin{align*}
    x_1 + 3x_2 - 5x_3 &= 4 \\
    x_1 + 4x_2 - 8x_3 &= 7 \\
    -3x_1 - 7x_2 + 9x_3 &= 16
\end{align*}
\]