1. Give all MATLAB commands to solve the linear system

\[
\begin{align*}
    x_1 + 2x_2 &= 5 \\
    3x_1 + 4x_2 &= 6.
\end{align*}
\]

Give also the command to compute the residual vector.

2. The coordinates \((x(t), y(t), z(t))\) for a curve on a sphere are defined by

\[
\begin{align*}
    x(t) &= \cos(7t) \cos(10t) \\
    y(t) &= \sin(7t) \cos(10t) \\
    z(t) &= \sin(10t)
\end{align*}
\]

for \(t \in [-\pi, +\pi]\).

Give all MATLAB commands to plot this curve.

**Alternative:** Bring to class on Monday the answers to assignments 2, 3, and 4 of the first lecture on MATLAB; and assignments 6 and 8 of MATLAB lecture 2.