1) Do the following problems from the textbook: # 21 (Section 1.7), # 28 (Section 3.2), # 16 (Section 5.2, solve this problem with both the Method of Elimination and the Laplace Transform).

2) Find \( \lim_{t \to \infty} \frac{x_2(t)}{x_1(t)} \) if \( x_1(t) \) and \( x_2(t) \) satisfy the system
\[
\begin{align*}
x_1' &= -2x_1 + x_2 \\
x_2' &= -5x_1 + 4x_2
\end{align*}
\]
with initial conditions \( x_1(0) = 1, \ x_2(0) = 3. \)