Math 17C
Kouba
Graphing Solutions to Systems of D.E.'s

\[ x_1 = \frac{8}{3} e^t + \frac{1}{3} e^{-5t} \]

\[ x_2 = \frac{4}{3} e^t + \frac{2}{3} e^{-5t} \]

Solve:
\[ X^1 = \begin{bmatrix} 3 & -4 \\ 4 & -7 \end{bmatrix} X \]

Parametric Plot:
\[ \begin{cases} x_1 = \frac{8}{3} e^t + \frac{1}{3} e^{-5t} \\ x_2 = \frac{4}{3} e^t + \frac{2}{3} e^{-5t} \end{cases} \]