1. Find $x(t)$ and $x(0^+)$. \( 7\dot{x} + 5x = 4g + 6g \) where $x(0^-) = 3$ and $g(0^-) = 0$. Take $g$ to be the unit step function.

2. Use the MATLAB® residue function to invert the following transfer function and find the value of $x(t)$.

\[
X(s) = \frac{3s + 2}{s^2(s + 10)}
\]