A second-order system has 10% overshoot and 3.0 settling time. It has final value 0.75.

3-(a) Draw the step response

7-(b) Write the Transfer Function

\[ G(s) = 0.75 \left( \frac{5 \cdot 10^{-5}}{s^2 + 2.67s + 5 \cdot 10^{-5}} \right) \]