

1. Starting with Equation 2.4.7, find $x(t)$ for an object falling vertically in the case of linear fluid resistance. Plot the function using appropriate dimensionless variables x' and τ (define what these are in terms of the fundamental constants in the problem).
2. F&C 2.9
3. R&C 2.12
4. R&C 2.13
5. R&C 2.15
6. R&C 2.16