Supplementary problems: 12.5 # 3, 4;   p.687 # 1-8, 11, 13, 16, 18
Quiz: 12.1 - 12.3, 12.5

Compulsory problems:
These are the type of boundary conditions we didn't do in class.
Consider the Sturm-Liouville ODE: $y'' + \lambda y = 0$ with the following boundary conditions

(1) **[10 pts.]** $y(0) = y(L) = 0$

(2) **[10 pts.]** $y'(0) = y'(2\pi) = 0$

(3) **[10 pts.]** $y(0) = y'(1) = 0$

Your homework raw score is: $\dfrac{n}{2m} \cdot M + \left(1 - \dfrac{n}{2m}\right) \cdot N = N + \dfrac{n}{2m}(M - N)$. For this homework, $M = 30$, $m = 12$, N is the number of compulsory problems you get correct, and n is the number of supplementary problems you complete. It should be noted that for the supplementary problems I will be looking for **full completion**, but I won't take off points for mistakes.