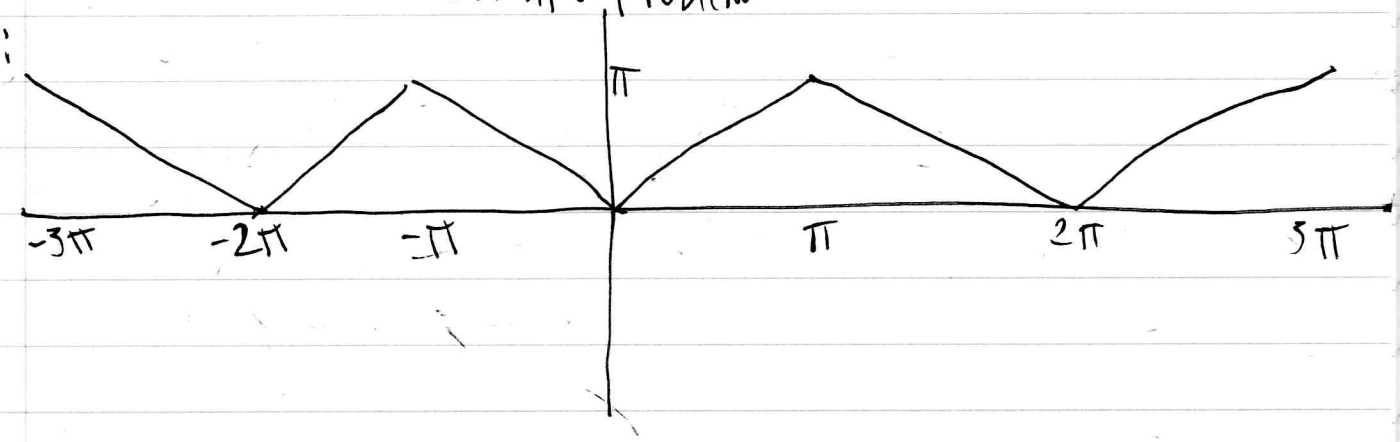
Unit 3 Lesson 3

- The general method for solving a DE via fourier series is as follows:
  - Substitute periodic input for fourier series of the fourier
  - Solve the general case via super position
  - Sum all particular solutions
  - Add homogeneous solution

Example Problem

1:



2: Noting

$$f(t) = \frac{\pi}{2} - \frac{4}{\pi}\left(\cos(wt) + \cos(3wt)/3^2 + \cdots\right)$$

$g(t) = f(wt)$ for given w.