

Math 304: Problem Set 5

Due: April 1, 2009

- Method of Undetermined Coefficients:

- Problem 3:

$$y = (k_1 + k_2x)e^{2x} + \frac{1}{4} + e^x$$

- Problem 7:

$$y = (k_1 + k_2x + \frac{1}{6}x^3)e^{2x}$$

- Problem 11:

$$y = e^x(k_1 \cos 2x + k_2 \sin 2x) + \frac{4}{17} \cos 2x + \frac{1}{17} \sin 2x$$

- Problem 17:

$$y = k_1 + k_2e^x - 2x - x^2 - \frac{1}{3}x^3$$

- Section 5.1: 1, 7, 9, 13, 17
- Section 5.2: 1, 5, 9, 11
- Section 5.3: 1, 3, 9, 11
- Section 5.4: 1, 3, 13