

Homework 4 (Due: 12/15)

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| (1) Sec. 6-1 29, | (2) Sec. 6-2 13, | (3) Sec. 6-2 17, |
| (4) Sec. 6-2 21, | (5) Sec. 6-2 24, | (6) Sec. 6-3 10, |
| (7) Sec. 6-3 19, | (8) Sec. 6-3 23, | (9) Sec. 6-3 25 |

Hint: To solve (4), we may refer to Example 8 and apply the fact that

(i) $e^x = 1 + x + \frac{x^2}{2} + \frac{x^3}{6} + \dots$

(ii) One of the solution is $y_1(x) = 1 + \frac{x^2}{2} - \frac{x^3}{6} + \dots$

Note: For (9), CAS is unnecessary.