

## Answers to the even numbered problems, HW 7

1. Section 2.10, #16

$$\frac{1}{2} \sin t - \frac{t}{2} \cos t$$

2. Section 2.15, #2

$$C_1 e^{-t} + C_2 e^{3t} + C_3 e^{4t}$$

3. Section 2.15, #4

$$C_1 e^t + C_2 \cos t + C_3 \sin t$$

4. Section 2.15, #6

$$\frac{1}{2} (e^{-t} + \cos t + \sin t)$$

5. Section 2.15, #8

$$C_1 e^t + C_2 e^{-t} + C_3 e^t \cos t + C_4 e^t \sin t$$