

Answers to Problems from section 5.5:

3. $\frac{2}{9}(x^3 + 1)^{3/2} + C$

4. $-2 \cos \sqrt{x} + C$

8. $\frac{1}{30}(x^3 + 5)^{10} + C$

10. $\frac{1}{2}e^{x^2}$

11. $\frac{1}{3}(\ln x)^3 + C$

16. $\frac{-2}{17(5t + 4)^{1.7}} + C$

24. $\frac{(\arctan x)^2}{x} + C$

26. $-\frac{1}{\pi} \sin \frac{\pi}{x} + C$

45. $2(e^2 - e)$

53. 2

Answers to Problems from section 5.6:

3. $\frac{1}{5}x \sin 5x + \frac{1}{25} \cos 5x + C$

4. $-xe^{-x} - e^{-x} + C$

8. $\frac{1}{m}x^2 \sin mx + \frac{2}{m^2}x \cos mx - \frac{2}{m^3} \sin mx + C$

9. $\frac{1}{2}(2x + 1) \ln(2x + 1) - x + C$

11. $t \arctan 4t - \frac{1}{8} \ln(1 + 16t^2) + C$

19. $\frac{1}{4} - \frac{3}{4}e^{-2}$

23. $2(\ln 2)^2 - 4 \ln 2 + 2$

26. $\frac{1}{3}x^3 \sin(x^3) + \frac{1}{3} \cos(x^3) + C$