

Answers to Problems from section 5.2:

9. 124.1644

18. $\int_1^5 \frac{e^x}{1+x} dx$

22. 21.

34. 2π

38. 25

41. $\int_{-1}^5 f(x) dx$

50. $2 \leq \int_0^2 \sqrt{x^3+1} dx \leq 6.$

Answers to Problems from section 5.3:

2. -70

8. 0

12. $\frac{63}{2}$

18. $\frac{9}{\ln 10}$

25. $1 + \frac{\pi}{4}$

28. 3

35. 3.75

42. $\frac{1}{2}x^2 + \frac{1}{3}x^6 + C$

45. $\frac{4}{3}$

$$46. \frac{1}{5}$$

$$55. (a) -\frac{3}{2}\text{m. (b)} \frac{41}{6}\text{m.}$$

Answers to Problems from section 5.4:

$$8. \ln x.$$

$$9. y^2 \sin y$$

$$10. -\tan x$$

$$12. 2x\sqrt{1+x^6}.$$

$$14. -e^x \sin^3(e^x)$$

$$15. -2 \cdot \frac{4x^2 - 1}{4x^2 + 1} + 3 \cdot \frac{9x^2 - 1}{9x^2 + 1}.$$

$$17. \sqrt{257}$$