Answers to even numbered problems, L1-L8.

L1 §5.1, pg. 371, #6, 10 , 12.

#6 $3e^x + C$

#10 $\frac{-1}{x} + \frac{1}{2x^2} + C$

#12 $(3/2)x^{2/3} - 9x^{1/3} + 6x + C$

L2 §5.1, pg. 371, #32, 36, 40 , 44.

#32 $y = -e^{-x} + 4$

#36 $f(x) = x^3 + 33x^2 - 2x + 6$

#40 $f(x) = 3\ln x - 4x + 4$

#44 124.69 ft.

L3 §5.2 pg. 383 #6,12,16,50

#6 $(1/3)\ln(3x + 5) + C$

#12 $(t^2 + 8)^{3/2} + C$

#16 $\frac{-1}{3(y^3+5)} + C$

#50 (a) $4800e^{-t/5}$ + (initial value − 4800) (b) value after 10 years = $1049.61

L4 §5.2, pg. 384 #28,36

#28 $2e^{\sqrt{x}} + C$

#36 $(-3/5)(1/x - 1)^{5/3} + C$

L5 §5.3, pg. 399 # 12,20,22,24,26

#12 7/2

#20 777.6

#22 7/54

#24 $3\ln 2$

#26 17/56

L6 §5.3, p 400 #36,40,54,58

#36 12

#40 6

#54 Two part question: 571.61 and 4001.64

#58 103.5

L7 §5.4 pg. 416 #2,4,6,12,14

#2 7/4

#4 9

#6 2/3

#12 81/4

#14 8/3

L8 §5.4, pg. 417 #18,20,22

#18 27/6

#20 $\frac{3}{2\ln 2}$

#22 $(1/4)\ln(9/5)$