3.4 Chain Rule, page 205

8. $F'(x) = 100(4x - x^2)^{99}(4 - 2x)$

16. $y' = -2e^{-2t}(\cos 4t + 2\sin 4t)$

36. $y' = \dfrac{1}{2\sqrt{1 + xe^{-2x}}}\left(e^{-2x} - 2xe^{-2x}\right)$

3.5 Implicit Differentiation, page 215

60. $\dfrac{dy}{dx} = \dfrac{-1}{2\sqrt{1 - x^2}}$

Chapter1 Review, p 74

26d. $x = \tan 1 \approx 1.5574$

3.6 Derivatives of Log functions, page 223

18. $\dfrac{dy}{dx} = \dfrac{-\tan \ln x}{x}$

44. $\dfrac{dy}{dx} = x^{\cos x}\left(\dfrac{\cos x}{x} - (\ln x)(\sin x)\right)$

3.7 Rates of Change in Natural and Social Sciences, page 234

8a. Maximum height = 100 ft.
8b. Velocity on way up $v(2) = 16$ ft/s. Velocity on way down $v(3) = -16$ ft/s.

3.10 Linear Approximation, page 255

28. $\sqrt{99.8} = 10 + \dfrac{1}{20}(99.8 - 100) \approx 9.99$

3.11 Hyperbolic Functions, page 262

4a. $\cosh 3 = \dfrac{e^3 + e^{-3}}{2} \approx 10.06766$

4b. $\cosh(\ln 3) = \dfrac{5}{3}$

Chapter 3 Review, page 265

12. $y' = \dfrac{4 \arcsin 2x}{\sqrt{1 - 4x^2}}$

100. $\dfrac{dx}{dt} = \dfrac{120}{\sqrt{241}}$