

# Rogawski's Calculus for AP\*

© 2012 | Second Edition

Jon Rogawski and Ray Cannon

---

## ERRATA

Page 47, #23. In question, “sketch the graph” should be changed to “sketch of the graph.”

Page 57, #63b. Part (b) should read: “Show, by evaluating  $f(x)$  at  $x = \pm\frac{1}{2}, \pm\frac{1}{4}, \pm\frac{1}{6}, \dots$ .”

Page 87, #34. In the second line, “ $(1-10^{-0.13t})$  kelvins” should read “ $(1-10^{-0.013})$  kelvins.”

Page 118, #41. “ $r=4$ ” should be changed to “ $t=4$ .”

Page 156, #88. Problem should read: “ $\sin \pi g(x), x = 4$ .”

Page 182, #35b, Figure 9. “ $dx$ ” should be changed to “ $h$ .”

Page 226, #56d, Figure 30. Pink line should continue to origin.

Page 279, #54. Problem should read: “Use the result of Exercise 53 to calculate

$$\frac{d}{dx} \int_{\sqrt{x}}^{\sqrt{x}} \frac{1}{\sqrt{x}} \sin t \, dt$$

Page 291, #49. Problem should read:  $\int \frac{\sin x \cos x}{\sqrt{\sin x + 1}} dx$

Page 320, #5. Replace “ $x^2 - 3x$ ” with “ $3x - x^2$ .”

Page 321, #53. The following sentence should be inserted at end of question: “The inner radii (in cm) starting from the top are 0, 4, 7, 8, 10, 13, 14, 20.”

#53, Figure 14b. Labels and tick marks at bottom of graph should be deleted and replaced with a single tick mark labeled “20.”

Page 334, #9. Change “N/m” to “N/m<sup>1.1</sup>” and change “stretch a spring” to “stretch the spring.”

Page 335, #38c. “1.5m to 1.2m” should read “0.8m to 0.5m.”

Page 387, in callout on left, “Comapanion” should read: “Companion.”

Page 397, #62. First part of problem should read: “ $\int_{-1/5}^{1/5}$ ”

Page 425, #56. First part of problem should read: “ $\int_{\pi/4}^{3\pi/4}$ ”

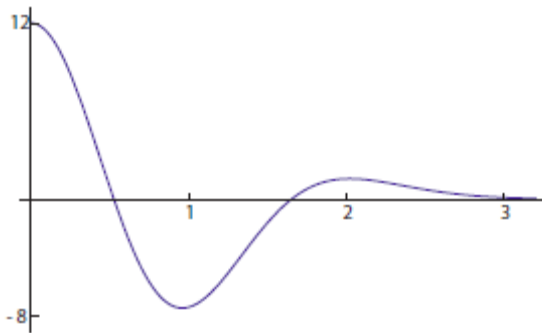
Page 437, #44c. “Hint: refer to Theorem 1 in Section 7.4” should be added to end of question.

Page 442. Replace equation in middle of the page directly beneath “For example,” with:

$$\frac{4-12x}{(x+1)(x^2+x+4)^2} = \frac{1}{x+1} - \frac{x}{x^2+x+4} - \frac{4x+12}{(x^2+x+4)^2}$$

Page 455, Exercises, #1a. The “ $dx$ ” at end of equation should be deleted.

Page 473, #44. Figure 18 should be:



Page 476, #70. “ $t$ ” in both exponents’ fractions should be “ $x$ ”.

Page 476, #72. “ $p(x)$ ” should be “ $p(t)$ ”.

Page 497, #33. “Find the centroid **for**...” should read: “Find the centroid **of**...”

Page 573, Change directions above #49 from “*In Exercises 49-74*” to “*In Exercises 49-78*.”

Page 644, Preliminary Exercises, #3a. Box should be Delta symbol.

Page 747, Exercises, #5b. Prompt should read: “Show that  $f$  has three critical points where  $x=0$  or  $y=0$  (or both) and one critical point where  $x$  and  $y$  are nonzero.”

Exercises, #5c. Prompt should read, “Use the Second Derivative Test to determine the nature of the critical points.”

Page 758, #27. In the denominator of the equation,  $d^2$  should be  $c^2$ .

Page A44, #57. Delete question.

Page A78, Section 7.8, #53. The answer should be  $7-3\pi$ .

Page A79, Section 7.9, #15. In the numerator of the solution,  $\operatorname{csch} t^2$  should be  $\operatorname{csch}^2 t$ .

Page A80, Chapter 7 Review, #103-107. #107 should be #103, #103 should be #105, and #105 should be #107.

The values in old #107 (new #103) should be \$1,131,361.78 and 10.13% (replacing \$1,134,704 and 10.66%).