Rogawski text errors (2nd edition)

MATH 116

1.4 p. 31, exercise 7 should show (1,0) not the (0,0) shown on the right hand side of the graph.

2.2 p.75, exercise 35 answer in back of book is correct as ∞ but solutions manual says only that limit does not exist.

2.4 Ex 79 Domain problem for inverse sine. Function is only defined when $-4 \le x \le 4$. Question should be modified to ask for one-sided limit from the left.

2.6 Solution Manual Ex 45 Appear to incorrectly evaluate $\lim_{h\to 0}\frac{\sin(2h)}{h}$ as 1 instead of showing work and getting 2. Final answer of zero is still correct.

3.1 Solution Manual and back of text Ex 67 The answer should be S'(80)≅-0.375 kph*km/car

3.3 Solution Manual Exercise 33: The solution manual does the derivative of the wrong function. The answer of $\frac{xe^x}{(x+1)^2}$given in the back of the text is correct.

3.5 Solution Manual and answers in back of text Exercise 7 Incorrectly gives $y''' = \frac{96}{25}t^{-11/15} - \frac{16}{9}t^{-7/3}$. The denominator 15 is incorrect, the answer should be $y''' = \frac{96}{25}t^{-11/5} - \frac{16}{9}t^{-7/3}$.

3.5 Solution Manual and answers in back of text Exercise 37 b) incorrectly states that the velocity is positive for $0 \le t \le 6$. The velocity is positive for 0<t<5 so the helicopter is slowing down between 0 and 5 minutes and speeding up between 5 and 6 minutes.

3.5 P 163 #43 The incorrect answer in the text book is n=3 , but the correct answer in the solution manual is n=-1,4.

3.6 #41. Answer in back of book is correct but in the solutions manual the last line is incorrect.

In the back of the text, there are two sections labelled**Section 3.10** Preliminary Questions and two sections labelled Section 3.10 Exercises. The second set of Section 3.10 answers are for **Section 3.11**.

3.7 p 176 #79 Units incorrect in back of text and solution manual. dV/dt should be in $cm^3/\sec$

3.9 p 187 #39 answer should be $3x^2 - 12x - 79$ (ie -79 instead of +79) Both text and solution manual incorrect.

3.11 # 13 Final answer in solution manual should be positive, not negative. Ie about 0.36 m/min Back of text has correct answer.

3.11 p. 200 question 19a) answer in back of text on p A49 is incorrect. Correct answer is in the student solution manual on p. 178, and answer is 594.64 km/h.Incorrect solution in instructor's solution manual.

4.1 #9, 11 Looks like answers in back of book are for exact change in f using calculator as opposed to estimating change in f using differential (ieEqn 1 as instructions indicate). See solution manual.

4.1 In back of text, there is a numbering problem. Answer for #31 is the answer given for #33. Answer for #33 is answer given for #35. Answer for #35 seems to be answer given for #31. Solution manual does not have the same problem.

4.2 Text does not seem to be consistent about whether critical numbers must be in interior of domain or can be at endpoints. Eg.questions p 222 #11, 13 endpoints of domain are considered critical numbers, but in 19 they don't include the endpoints of 1 and -1.

4.2 #7. Critical numbers should be x=2 not x=0. Back of text is wrong. Student solution's manual is correct.

4.3 MVT and Monotonicity p. 232 instructions for exercises 23-52 say "determine whether the critical point is a local min or a local max (or neither)."

Because a critical point is an *x* value,

and a local extrema is a *y* value,

a critical point is **never** a local extrema.

A critical point *c* may yield a local extrema*f(c)*.

4.6Solution manual Exercise #15 $\lim_{x \to \pm\infty} x^2 - 4x^3 = \infty$ should be $\lim_{x \to -\infty} x^2 - 4x^3 = \infty$ and $\lim_{x \to \infty} x^2 - 4x^3 = -\infty$.

4.6 Solution manual Exercise #29 Inflection points at $x = \pm \frac{\sqrt{3}}{2}$ should be $x = \pm \frac{\sqrt{3}}{\sqrt{2}}$

4.7 Ex.#47 Note that the units for AB are incorrect. AB = 900 cm^2

11.1 Parametric Equations p 609 Theorem 1. The inequality $0 \le 1 \le t$ should be $0 \le t \le 1$.

11.1 #3 Solution manual uses wrong parametric curve. (No answer in back of book since it is "show…" question.) We can show that the parametric curve in Example 3 is the Cartesian equation
$y = -\frac{49}{64000}x^2 + \frac{5}{2}x$, which is a parabola since it is of the forrn $y = ax^2 + bx + c$ with $a = -\frac{49}{64000}, b = \frac{5}{2}, c = 0.$

11.1 #5 (b) and (d) Answers in back of book show open circles at initial and terminal points of parametric curve when these points should be included.

11.1 #19 Solution manual uses wrong equation for curve in part (b). For equation given in text, correct graph is II (ie answer in back of text is correct).

MATH 126 Rogawski Text Errors

5.1 #3 p 296 In table, units for R(t) should be cm/h not cm.

5.1 #11 p 301 of student solution manual:Midpoint sum shows upper limit of sum as k=6 , but should be k=3

5.7 #7p 339 Answer incorrect in book and solution manual since
$\tan^{-1}(\tan(8)) \neq 8$, $\tan^{-1}(\tan(8)) = 8 - 3\pi$. Correct answer is $7 - 3\pi$.

6.2 #51 In question, units for position function should be in metres, not in m/s.

6.2#53 Answer for average speed is correct in solution manual but incorrect in back of text. Average speed is approximately 159.03 m/s.

6.3 #13 Correct answer, (ii), in sol'n manual; incorrect answer in text.

6.3 ex #47 Student solution manual answer correct. Answer in back of text incorrect.

6.4 #25. Incorrect answer in text. Student solution manual has correct answer of 256π/15.

6.5 p 391 incorrect unit conversions given. 1 J ≈0.738 ft-lb; 1 ft-lb ≈ 1.356 J; 1 ft-lb ≈ 0.324 calorie ; 1 J ≈ 0.239 calorie; 1 calorie ≈ 3.088 ft-lb

6.5 #9solution manual incorrect (error in antiderivative) Back of text correct. Approx. 3.800 J

6.5 #17 Text answer incorrect; sol'n manual answer is correct. Diagram should show a box 8m long, 4m wide, 5m high with a spout 1m above the top (see student solution manual for correct diagram).

6.5 #19 Diagram should show a spout 2m above the top (missing from some copies of text).

6.5 #21 Diagram should show *r* as the radius and ℓ as the length (missing from some copies of text).

6.5 #25 Text answer is wrong; Solution Manual gives the correct answer 3.79x10^6 Joules.

Ch 6 Review Ex #51 p 399 Answer in solution manual (985203.5 J) is correct. Answer in back of book is incorrect.

7.2 #25 Text answer is wrong. Answer in student solution manual uses a reduction formula which is not necessary.

7.5, p. 432, Example 6. The line after equation 8 should have 2Cx where it shows 2C. Since C ends up being zero, answer given is still correct.

7.6, #45 Student solutions manual states that integral $\int_{-\infty}^{0} \frac{x}{1+x^2}\,dx = \infty$. Answer should be $-\infty$. Answer in back of book correctly states that integral diverges.

Ch 7 Review Ex p 464 #41 and 47 appear to be identical

8.1 #15 and #21A correct solution using the method in the solution manual would include all the steps required to calculate an <u>improper integral</u>. The SSM is in error in not showing the steps needed to evaluate the improper integrals.

8.4 #19 Answer in the back of the book should be $T_n(x) = 1 - x + x^2 - x^3 + \ldots + (-1)^n x^n$. Answer in solution manual is correct.

Ch 8 Review p 578 #21 shows $(x-2)^2$ where the correct entry is $(x-1)^2$.

10.6 #17 Back of text incorrect. Solution manual correct. I.O.C. is $(-\infty, \infty)$ Radius of convergence is ∞.

Ch 10 Review p 604 Ex #19 Solution in solution manual drops the 3 in the question. Answer should be e^3 (as in back of text).