

Complex Analysis for Mathematics and Engineering: 5th Edition

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Typos for the Second Printing

Chapter 1–Answer Section

- **Section 1.3**

- Page 582, problem 1e.
Replace $\sqrt{(x-1)^2 + y^2}$ with $(x-1)^2 + y^2$.

Chapter 2–Text

No typos found as yet

Chapter 3–Text

- **Section 3.2**

- Page 112, problem 16b.
Replace $\frac{1}{2}[u_x - v_y + i(y_x + u_y)] = 0$ with $\frac{1}{2}[u_x - v_y + i(v_x + u_y)] = 0$.

Chapters 4–10

No typos found to date.

Chapter 11–Text

- **Section 11.5**

- Page 453, problem 3
Replace “ $T(0, y) = 10$, for $y < 1$ ” with “ $T(0, y) = 10$, for $y > 1$.”
- Page 454, problem 5
Replace “ $T(x, y) = 0$, for $\frac{-\pi}{2} < x < \frac{\pi}{2}$ ” with “ $T(x, 0) = 0$, for $\frac{-\pi}{2} < x < \frac{\pi}{2}$.”

- **Section 11.8**

- Page 484, problem 2a.
Replace “ $\frac{4u^2}{(r+\frac{1}{r})^2} + \frac{4v^2}{(r-\frac{1}{r})^2} = 1$ ” with “ $\frac{u^2}{(r+\frac{1}{r})^2} + \frac{v^2}{(r-\frac{1}{r})^2} = 1$ ”
- Page 484, problem 2b.
Replace “ $\frac{u^2}{\cos^2 \theta} - \frac{v^2}{\sin^2 \theta} = 1$ ” with “ $\frac{u^2}{4 \cos^2 \theta} - \frac{v^2}{4 \sin^2 \theta} = 1$ ”
- Page 485, problem 6
Replace the word “cardioid” with the phrase “cardioid-like curve”

- Page 485, problem 7
Replace the word “cardioid” with the phrase “cardioid-like curve.”

- **Section 11.11**

- Page 509
Replace “ $F(z) = \lim_{a \rightarrow 0} \frac{\log(z) - \log(z-a)}{2a}$ ” with “ $F(z) = \lim_{a \rightarrow 0} \frac{\log(z+a) - \log(z-a)}{2a}$ ”

Chapter 11–Answer Section

- **Section 11.9**

- Page 619, problem 3
Replace “ $f'(z) = A(z+1)^{\frac{1}{2}}(z-1)^{\frac{1}{2}}$ ” with “ $f'(z) = A(z+1)^{\frac{1}{2}}(z-1)^{-\frac{1}{2}}$ ”
- Page 619, problem 9
Replace “ $x_2 =$ ” with “ $x_2 = 0$ ”

Chapter 12–Text

- **Section 12.3**

- Page 535 Problems 2–5 should be combined into one problem numbered 2 with parts a,b,c.

- **Section 12.4**

- Page 539, Table 12.1, row 5 (Frequency shifting)
Replace “ $\mathfrak{F}(e^{-i\omega_0 t}U(t))$ ” with “ $\mathfrak{F}(e^{i\omega_0 t}U(t))$ ” (i.e., no negative exponent)
- Page 540, problem 7
Replace “ $\mathfrak{F}\left(\frac{i \sin \pi t}{1-t^2}\right)$ ” with “ $\mathfrak{F}\left(\frac{\sin \pi t}{t^2-1}\right)$ ”
- Page 541, problem 9
Replace “ $\frac{1-|w|}{4\pi}$ ” with “ $\frac{1-|w|}{4}$ ”

- **Section 12.6**

- Page 553, problem 7
Replace “ $t - 1 + e^t$ ” with “ $t - 1 + e^{-t}$ ”

- **Section 12.7**

- Page 557, line 5
Replace “ $1 - \cos t$ ” with “ $1 + \cos t$ ”

- **Section 12.8**

- Page 562, problem 8
Replace “ $\ln \frac{s^2}{s^2+1}$ ” with “ $\frac{-1}{2} \ln \frac{s^2}{s^2+1}$ ”

Chapter 12–Answer Section

- **Section 12.5**

- Page 621, problem 1
Replace “ $(0 + 0i) = \frac{-1}{\sigma + i\tau} = \frac{1}{s}$ ” with “ $(0 + 0i) - \frac{-1}{\sigma + i\tau} = \frac{1}{\sigma + i\tau} = \frac{1}{s}$ ”

- **Section 12.10**

- Page 624, problem 15
Replace “ $\mathcal{L}(e^t)\mathcal{L}(\cos t)$ ” with “ $\mathcal{L}(e^{-t})\mathcal{L}(\cos t)$ ”