Errata for first printing:

p. 46; Prob. 2.15: First line after equation should read:
Use MATLAB to create a plot of the cosine (solid line) along...

p. 70; First line of code should read:
% create animation with getframe and movie

p. 85; Prob. 3.12: Second line within loop should read
\[ y(i) = 12 + 6 \cdot \cos(2\pi t(i)/ \ldots) \]

p. 86; Prob. 3.14: Second part of piecewise function should be
\[ 624 - 3t \quad 8 \leq t \leq 16 \]

p. 161; The first two MATLAB commands used to set up the function and its derivative should have “m” enclosed in parentheses as:
\[
\begin{align*}
&>> y = @(m) \sqrt{9.81*m/0.25}\cdot \tanh(\sqrt{9.81*0.25/m}*4) - 36; \\
&>> dy = @(m) \frac{1}{2}\cdot \sqrt{9.81/(m*0.25)} \cdot \tanh(9.81*0.25/m) \ldots \end{align*}
\]
\[ ^{(1/2)*4} - \frac{9.81}{2*m}\cdot \text{sech}(\sqrt{9.81*0.25/m}*4)^2; \]

p. 178; Prob. 6.4d: Change “five iterations” to “three iterations.”

p. 191; The third MATLAB commands used to invoke the goldmin function and should be changed to
\[
\begin{align*}
&>> [xmin,fmin,ea]=\text{goldmin}(z,0,8) \\
\end{align*}
\]

p. 203; Fig. P7.33: Labels for Lift and Friction should be switched.

p. 300; First line of code at top of page should be changed to
\[
\begin{align*}
&>> \text{format short e, } x0 = [3; 3]; \\
\end{align*}
\]

p. 318; Prob. 13.11: Solution equation should add subscript lower case italic \( i \) to the \( c \) as shown below:
\[
y_i = c_i e^{\lambda t}
\]
p. 349; Change MATLAB commands at top of page to

```matlab
>> x = [10 20 30 40 50 60 70 80];
>> y = [25 70 380 550 610 1220 830 1450];
>> [a,r2] = linregr(x,y)
a =
19.4702 -234.2857
r2 =
0.8805
```

Change MATLAB commands at bottom of page to

```matlab
>> [a,r2] = linregr(log10(x),log10(y))
a =
1.9842 -0.5620
r2 =
0.9481
```

p. 357; Prob. 4.16: Add the following:
Test it for the data from Examples 14.2 and 14.3.

p. 359; Prob. 14.30: Change the last line in the problem statement to:
Use your result to determine the shear stress \((\mu du/dy)\) at the surface where \(\mu = 1.8 \times 10^{-5}\) N-s/m².

p. 376; Prob. 15.10: After equation, should read:

Use **general linear least-squares** to estimate the initial concentration of each organism...

p. 377; Prob. 15.18: First line should read:

15.18 Use **general linear least squares** to find...

p. 379; Prob. 15.27: First line should read:

15.27 Use **nonlinear regression and** the following set of pressure-volume data to...

p. 402; First line in last paragraph of Case Study, change “Hz” to **cycles/yr**.

p. 427; Prob. 17.15: Change last line to:

Determine \(v\) at \(T = 400 \, ^\circ\text{C}\).

p. 542; Prob. 21.24: Change first temperature in Table from 19 to **20.2**.

p. 544; Prob. 21.38: Change \(\partial f(\partial x\partial y)\) to \(\partial^2 f(\partial x\partial y)\).

p. 578 ; Change first Lorenz equation to:
\[ \frac{dx}{dt} = -\sigma x + \sigma y \]

p. 582; Change first MATLAB command to:

\[ >> \text{plot3}(y(:,1),y(:,2),y(:,3)) \]

p. 586; Prob. 22.18:

Second equation should be

\[ \frac{dCB_1}{dt} = -\frac{1}{\tau} CB_1 + kCA_1 \]

Fourth equation should be

\[ \frac{dCB_2}{dt} = \frac{1}{\tau}(CB_1 - CB_2) + kCA_2 \]

p. 587; Prob. 22.21: In Table, units of area should be \(10^4\) m\(^2\).

p. 615; Prob. 23.21. Change problem statement to:

23.21 Perform the same computations as in Prob. 23.20 but based on the first floor of the structure in Prob. 22.22.

**Errata for second printing:**

p. 17; Eq. 1.18: First \(C_d\) should be changed to \(c_d\):

\[ c_d = \frac{1}{2} \rho AC_d \]

p. 179; Prob. 6.16: Below equation, \(L = 5\) m\(^3\) should be changed to \(L = 5\) m.

p. 180; Prob. 6.20: Units of \(k_2\) should be \(g/(s^2 m^{0.5})\).

p. 379; Prob. 15.27: The beginning of the problem should read:

**15.27 Employ nonlinear regression and** the following set of pressure-volume data to...

p. 379; Prob. 15.28: The problem statement below the table should read:

**15.27 Use nonlinear regression to estimate** the initial population of each organism \((A, B, ...\)

p. 397; Last line: Change 31.25 to 18.75

\[ y=5+\cos(2\pi*12.5*tspan)+\sin(2\pi*18.75*tspan); \]