Corrections for Chapter 8

Page 212, right column, line 3. Replace ”number 2” by ”number 3”

Page 215, Figure 8.8. Replace $a_1$ and $a_2$ respectively by $a_0$ and $a_1$. Also put a fat dot into the graph at the $(0, p_0)$ position.

Page 216, left column, lines 45 and 4 from the bottom. Interchange $f(c)$ and $f(d)$ in both places.
right column, line 11. Interchange $f(c)$ and $f(d)$. Lines 12 and 11 from the bottom. Interchange $c$ and $d$.

Page 221, left column, lines 8 and 9. Delete ”per unit time” lines 4 and 5 from the bottom. Delete ”per unit distance”

Page 223, right column, line 7. Replace ”We have verified” by ”It follows”

Page 227, right column, 19. The equation should have $f'(c)(b - a)$ in place of $f'(c)(a - b)$

Page 235, Figure 8.33. Replace $f(x)$ by $g(x)$ in the equation. Also, the graph of $g(x) = x^{\frac{1}{3}}(x^2 - 14)$ is not correct. The correct version is sketched below.

Page 236, left column, line 17, ”value” not ”vale”

Page 237, left column, line 15 from the bottom. Interchange ”increasing” and ”decreasing” line 10 from the bottom. Delete ”What is the height of this box?”

Page 238, right column, line 16 from the bottom. The denominator of the expression is better (but equivalently) written as $(2R)^{\frac{1}{2}}x(2R - x)^{\frac{1}{2}}$.
Line 7 from the bottom. Replace the term $\pi(2Rx)^{\frac{1}{2}}(4Rx - 2x^2)^{\frac{1}{2}}$ by $\pi(2R)^{\frac{1}{2}}x(2R - x)^{\frac{1}{2}}$
Page 239, left column, lines 2 and 3. These should instead read

\[ S\left(\frac{\pi}{3}R\right) = \pi (2R)^{\frac{1}{2}} \left(\frac{4}{3}R\right) (2R - \frac{4}{3}R)^{\frac{1}{2}} \]

\[ = \frac{8\pi}{3\sqrt{3}} R^2. \]