

ERRATA SHEET FOR MONTE CARLO SOLUTIONS MANUAL

Page 1, line 6 of Exercise 2-3, “ $x_6 = 4$ ” should be “ $x_6 = 2$ ”.

Page 9, Exercise 3-10, lines 2-5 of the second column of the table should be:

$q_{70}^{(1)} = .10$
${}_{1 }q_{70}^{(1)} = .10$
$q_{70}^{(2)} = .10$
${}_{1 }q_{70}^{(2)} = .50$

Page 16, line 2, line 3, and last line, “ $g(x)$ ” should be “ $h(x)$ ”.

Page 20, last line, “ $h(x)$ ” should be “ $h(x) =$ ”.

Page 23, line 18, “ $|v|$ ” should be “ v^2 ”.

Page 25, Exercise 4-14, begin lines 1 and 2 with “(a)” and “(b)”, respectively.

Page 25, line 2 of Exercise 4-14, “ X_1 ” should be “ X_2 ”.

Page 27, line 10, before “Hence” add: “Also, $\sup_{-.5 \leq x \leq .5} f(x) = \frac{1}{\pi}$ and $(b-a) = (.5 - (-.5)) = 1.$ ”

Page 27, the equation after “Hence” should be:

$$\text{Var}(\tilde{\theta}) = \frac{\theta[c(b-a) - \theta]}{n} = \frac{(.29517) \left[\left(\frac{1}{\pi} \cdot 1 \right) (1 - .29517) \right]}{500} = .00001366.$$

Page 28, line 4, “.00038” should be “.0003807”.

Page 28, Exercise 5-3, the solution should read:

(a) For Example 5.2, we have using the results of the chapter

$$\frac{\text{Var}(\tilde{\theta})}{\text{Var}(\hat{\theta})} = \frac{\text{Var}(4\tilde{\theta})}{\text{Var}(4\hat{\theta})} = \frac{2.697/n}{0.7971/n} = 3.384.$$

(b) For Example 5.3, we have

$$\frac{\text{Var}(\tilde{\theta})}{\text{Var}(\hat{\theta})} = \frac{.001708/n}{.00009659/n} = 17.69.$$

Page 29, the second line should be:

$$\frac{\text{Var}(\tilde{\theta})}{\text{Var}(\hat{\theta})} = \frac{.00001366}{.0000003807} = 35.88.$$

Page 32, line 6, “+ 4e^u - 4e^{1-u}” should be “- 4e^u + 4e^{1-u}”.

Page 36, last line of Exercise 5-11, “.001325” should be “.001335”.

Page 39, line 3, “ $\frac{13}{20}$ ” should be “ $\frac{31}{20}$ ”.

Page 40, line 2, “f(x)” should be “ $f(x) = \frac{1}{\pi(1+x^2)}$ ”.

Page 56, line 2, “S₇” should be “s₇” and “X_i” should be “x_i”.

Page 56, line 6, “S_m” should be “s_m”.

Page 63, line 1 of Exercise 9-5, “(i)” should be “(a)”.

Page 64, line 1, “(ii)” should be “(b)”.

Page 64, Exercise 9-6, lines 10 and 13, “.9549” should be “.09549”.

Page 64, Exercise 9-6, line 14, “b = .5529a” should be “b = .2366a”.

Page 64, last line should be “ $\hat{a} = .7104$ and, subsequently, the estimate $\hat{b} = .8784$ ”.

Page 66, in the last column of the first row of the table, “.097” should be “.103”.