

Errata and Updates for ASM Exam MAS-I (First Edition Seventh Printing) Sorted by Page

[12/17/2020] On page 66, replace the solution to exercise 4.30 with

Here $j = 201$ in formulas (4.3) and (4.4). $E[N_j] = \text{Var}(N_j) = \ln 201 = 5.3033$. We want $\Pr(N_j > 10.5)$, where we added 0.5 for a continuity correction.

$$1 - \Phi\left(\frac{10.5 - 5.3033}{\sqrt{5.3033}}\right) = 1 - \Phi(2.56) = \boxed{0.0119}$$

[12/16/2020] On page 74, 6 lines below the quiz, change α_i to π_i . Also, replace the last 2 sentences on the page with

An aperiodic positive recurrent irreducible Markov chain is called *ergodic*.

And delete the footnote. In the twelfth edition of *Introduction to Probability Models*, Ross defines “ergodic” on page 233

[12/16/2020] On page 95, on the sixth line, change “Let X_n be the size of the population at time n ” to “Let X_n be the size of the n^{th} generation”.

[12/27/2020] On page 208, in equation (19.2), change “ $r(\mathbf{F})$ ” to “system life”.

[12/27/2020] On page 209, in Table 19.1 equation (19.2), change “ $r(\mathbf{F})$ ” to “system life”.

[12/31/2020] On page 279, in exercise 24.4, on the third line, change $U_2 < cg(x)$ to $U_2 < \frac{f(x)}{cg(x)}$.

[1/2/2021] On page 309, on the second line of Subsection 26.2.2, delete the two 2s in the formula. It should read

$$\beta_T(x) = \begin{cases} x + 1 & -1 \leq x \leq 0 \\ 1 - x & 0 < x \leq 1 \\ 0 & \text{otherwise} \end{cases}$$

[1/20/2021] On page 612, 9 lines from the bottom, change “... odds ratio”. The odds ratio is defined...” to “... odds. Odds is defined...”.

[1/19/2021] On page 618, in Example 45F, on the last line, change $\beta_{1j} + 0.02\beta_2$ to $\beta_{1j} + 0.02X_2$.

[1/20/2021] On page 628, in exercise 45.18, change “relative odds” to “odds ratio”.

[1/20/2021] On page 629, in exercise 45.22, the fitted coefficients are impossible, since they must be monotonically non-decreasing, so Intercept(Important) should be greater than Intercept(Not important). As a simple fix, change 0.14 to -0.14 .

[1/20/2021] On page 637, in the solution to exercise 45.29, change $\ln(\pi_2/\pi_1) = \ln(\pi_3/\pi_2) = -0.5 + 5\beta_1$ to $\ln(\pi_1/\pi_2) = \ln(\pi_2/\pi_3) = -0.5 + 5\beta_1$.

[12/18/2020] On page 726, in exercise 51.4, in the third bullet, change x to x_2 .

[12/18/2020] On page 809, in the solution to exercise 56.16, replace the final answer $(\hat{\beta}_1, \hat{\beta}_2)$ with $(\hat{\beta}_1, \hat{\beta}_2) = (3, 0)$.