Errata and Updates for the 2nd Edition of the ACTEX Manual for Exam P

(Last updated 04/10/2025) sorted by page

Page 157 **Problem 19. Third line.**

After "The proportion of the coins in the collection that are loaded towards a head is p", add "and the rest of the coins are loaded towards a tail".

Page 185 **Problem 14. First line.**

Change "denote2" to "denotes".

Page 347 **Problem 27. Second line.**

Change "...an exponential distribution with mean 2." to "...an exponential distribution with mean 1."

Page 381 **Problem 17.**

Change the choices to:

(A) 0.5793 (B) 0.5987 (C) 0.6179 (D) 0.6554 (E) 0.6915

Page 391 **Solution to Problem 17.**

Change the solution to:

Suppose that the lognormal parameters are μ and σ.

Then $P[X \le 1] = P[\ln X \le \ln 1] = P\left[\frac{\ln X - \mu}{\sigma} \le \frac{0-\mu}{\sigma}\right] = \Phi\left(\frac{-\mu}{\sigma}\right) = 0.4013$,

and $P[X \le 2] = P[\ln X \le \ln 2] = P\left[\frac{\ln X - \mu}{\sigma} \le \frac{\ln 2-\mu}{\sigma}\right] = \Phi\left(\frac{\ln 2-\mu}{\sigma}\right) = 0.5000$.

From the normal table we get $\frac{-\mu}{\sigma} = -0.25$ and $\frac{\ln 2 - \mu}{\sigma} = 0.0$.

Solving for μ and σ results in $\mu = \ln 2$ and $\sigma = 4\ln 2$.

Then $P[X \le 4] = P[\ln X \le \ln 4] = P\left[\frac{\ln X - \mu}{\sigma} \le \frac{\ln 4-\mu}{\sigma}\right]$

$= \Phi\left(\frac{\ln 4 - \ln 2}{4\ln 2}\right) = \Phi(0.25) = 0.5987$.

Answer B

Page 398 **Problem 6.**

Change the choices to:

(A) $\frac{1}{35}$ (B) $\frac{2}{35}$ (C) $\frac{4}{35}$ (D) $\frac{8}{35}$ (E) $\frac{16}{35}$

Page 405 **Solution to Problem 6.**

Change last line of the solution to:

Then $E[X^3] = \dfrac{\Gamma(2+3)\times\Gamma(2+3)}{\Gamma(2)\times\Gamma(2+3+3)} = \dfrac{4!\times 4!}{1!\times 7!} = \dfrac{4}{35}$.

Page 528 **Solution to Problem 23. Third Line.**

Remove the extra 125. It should read:

$$= \frac{U^2}{2000} + U \times \frac{1000 - U - 150}{1000} = \frac{1700U - U^2}{2000}.$$