## Errata for Foundations and Applications of Statistics

## Randall Pruim\*

Calvin College

Grand Rapids, MI

August, 2013

If you find an error not listed here, please send an email to <code>rpruim@calvin.edu</code> with subject line "FAST Errata".

location	issue
28, ¶-1	missing comma in "will be assigned large numbers [,] and events"
29, ¶-1	"even a simply" should be "even a simple"
50, Lem 2.3.2	Part (2) of the "Furthermore" has an unnecessary " $\in$ [0, 1] for all $x \in R$ "
109, Prob 2.84	Final punctuation should be '.' not '?'.
155, caption	"jn" should be "An"
211, Lem 4.6.8	"If" should be "Let"
239	"fit the model" should be "fit a model"
252, Ex 5.1.1	Second " $\pi = 1/3$ " should be " $\pi = 1/5$ "
271, formula -2	$(x-\overline{x})^2$ should be $(x_i-\overline{x})^2$
286, Thm 5.4.1	$P(\chi^2 \ge X^2)$ should be $P(\chi^2 \le X^2)$
288, R code	df is off by one (should be, for example, 5-1
287, Ex 5.4.9	"fits" should be "fit"
315, Prob 5.2	0.078 should be 0.78 (but the problem can be done either way)
317, Prob 5.16	The data appear in Problem 5.15 (not 5.14)
331, line -1	"for any other vector" should be "for any other vector in the model space"
336	It would be clearer to write $\alpha_0 1 + \beta_1 (\mathbf{x} - \overline{\mathbf{x}}) + \boldsymbol{\varepsilon}$ instead of $\alpha_0 + \beta_1 (\mathbf{x} - \overline{\mathbf{x}}) + \boldsymbol{\varepsilon}$
338	v0 should be v1 in defintion of u1.
348	In Figure 6.5, the residual vector should be denoted $\boldsymbol{E}$ rather than $\boldsymbol{\varepsilon}$ .
349, formula 1	The denominator of the rightmost side should be blue, not red.

 $<sup>^*{\</sup>rm rpruim@calvin.edu}$ 

location	issue
383	$-0.0444$ should be $-0.444$ in the confidence intervals for $\beta_1$ and $e^{\beta_1}$
388, Table 6.2	Some hats are missing on $\beta_1$ in the estimator column.
396, prob 6.36	power.test.test should be power.t.test
398, Prob 6.42	SSE should be $SSM$ in both displayed equations.
438	$m{Y}$ should be $m{y}$ in the bottom half of the page.
446	tukeyHSD() should be TukeyHSD()
457	Formula for $C_2$ is a duplicate of formula for $C_1$ . It should be $C_2 = \frac{\mu_{11} + \mu_{21}}{2} - \frac{\mu_{12} + \mu_{22}}{2}$ . Also, the first term for $C_3$ should be $\mu_{11}$ , not $\mu_{22}$ .
566, Ex C.2.1	$2\langle 1,1\rangle + 3\langle 2,3\rangle$ should be $-4\langle 1,1\rangle + 3\langle 2,3\rangle$ .
580, item $2$	unnecessary paren at end of item
595, Sol 5.36	n should be at op the product symbol rather than behind it. Furthermore, the wrong prior has been used.
601, Prob D.7	should be $0.3 \cdot Norm(8,2) \ \boxed{:} \ 0.7 \cdot Norm(16,3)$
610	confidence interval should also reference page 202