

Revisions for “The Complete Idiot’s Guide to Statistics”, First Edition

Notation errors occurred in Chapters 14, 16 and 17 due to a problem with the software used to generate the equations. The following table summarizes the current notation in the book, the corrected notation, the variable description, and the pages in the book affected by the error.

Notation in Book	Correct Notation	Variable Description	Pages in Book
$\sigma_x^\mu = \frac{s}{\sqrt{n}}$	$\hat{\sigma}_x = \frac{s}{\sqrt{n}}$	Estimated Standard Error of the Mean	192, 193, 196, 197, 198, 222, 229, 231, 330
$\sigma_{x_1 - \bar{x}_2}^\mu = \sqrt{\frac{\sigma_1^{\mu^2}}{n_1} + \frac{\sigma_2^{\mu^2}}{n_2}}$	$\hat{\sigma}_{x_1 - \bar{x}_2} = \sqrt{\frac{\hat{\sigma}_1^2}{n_1} + \frac{\hat{\sigma}_2^2}{n_2}}$	Estimated Standard Error of the Difference Between Two Means	243, 244, 248, 250, 334
$\sigma^\mu = s$	$\hat{\sigma} = s$	Estimated Standard Deviation for the Population	243
$\sigma_{p_1 - \bar{p}_2}^\mu = \sqrt{(\rho^\mu)(1 - \rho^\mu)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$	$\hat{\sigma}_{p_1 - \bar{p}_2} = \sqrt{(\hat{p})(1 - \hat{p})\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$	Estimated Standard Error of the Difference Between Two Proportions	256, 257, 334, 335
$\rho^\mu = \frac{x_1 + x_2}{n_1 + n_2}$	$\hat{p} = \frac{x_1 + x_2}{n_1 + n_2}$	Estimated Overall Proportion of Two Populations	257, 334

Page 45:

On the bottom of the page, the sample mean is expressed as:

$$s = \frac{\sum_{i=1}^n x_i}{n} = \frac{3 + 7 + 4 + 9 + 5 + 4 + 6 + 17 + 4 + 7}{10} = 6.6$$

It should be stated as:

$$\bar{x} = \frac{\sum_{i=1}^n x_i}{n} = \frac{3 + 7 + 4 + 9 + 5 + 4 + 6 + 17 + 4 + 7}{10} = 6.6$$

Page 59:

The variance equation is missing a plus sign. It should read:

$$s^2 = \frac{(7-7.8)^2 + (9-7.8)^2 + (8-7.8)^2 + (11-7.8)^2 + (4-7.8)^2}{5-1} = 6.7$$

Page 69:

The following correction needs to be noted:

Equation in Book	Correct Equation
$5.5 + 1.5(7.5) = -5.75$	$5.5 - 1.5(7.5) = -5.75$

Page 89:

Bob's Basics should read, "... the probability of Event A, given that Event B has occurred,..."

Page 94:

The following correction needs to be noted:

Equation in Book	Correct Equation
$P[B/A] = \frac{P[B] \cdot P[A/B]}{(P[B] \cdot P[A/B]) + (P[B] \cdot P[A/B'])}$	$P[B/A] = \frac{P[B] \cdot P[A/B]}{(P[B] \cdot P[A/B]) + (P[B'] \cdot P[A/B'])}$

Page 99:

The total number of unique combinations should be displayed as:

$$25 * 25 * 25 * 9 * 9 * 9 * 9 = 102,515,625 \text{ possible combinations.}$$

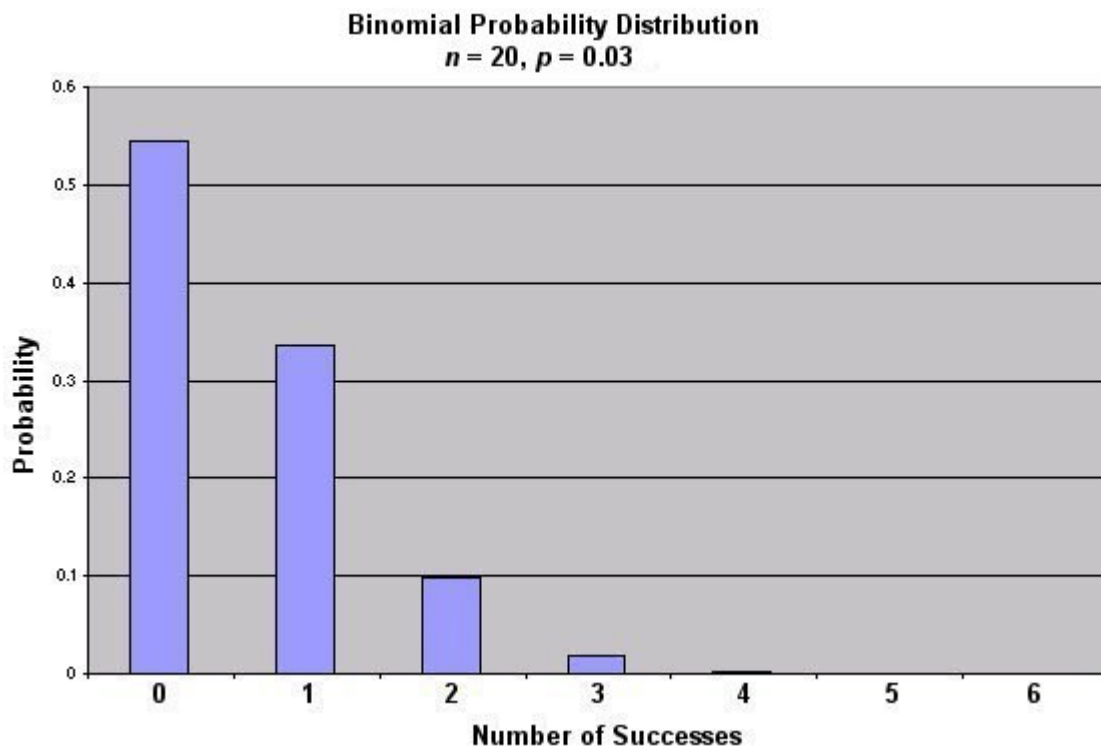
Page 101:

The following correction needs to be noted for the number of combinations of n objects taken r at a time:

Equation in Book	Correct Equation
${}_nC_r = \frac{n!}{(n-r)r!}$	${}_nC_r = \frac{n!}{(n-r)!r!}$

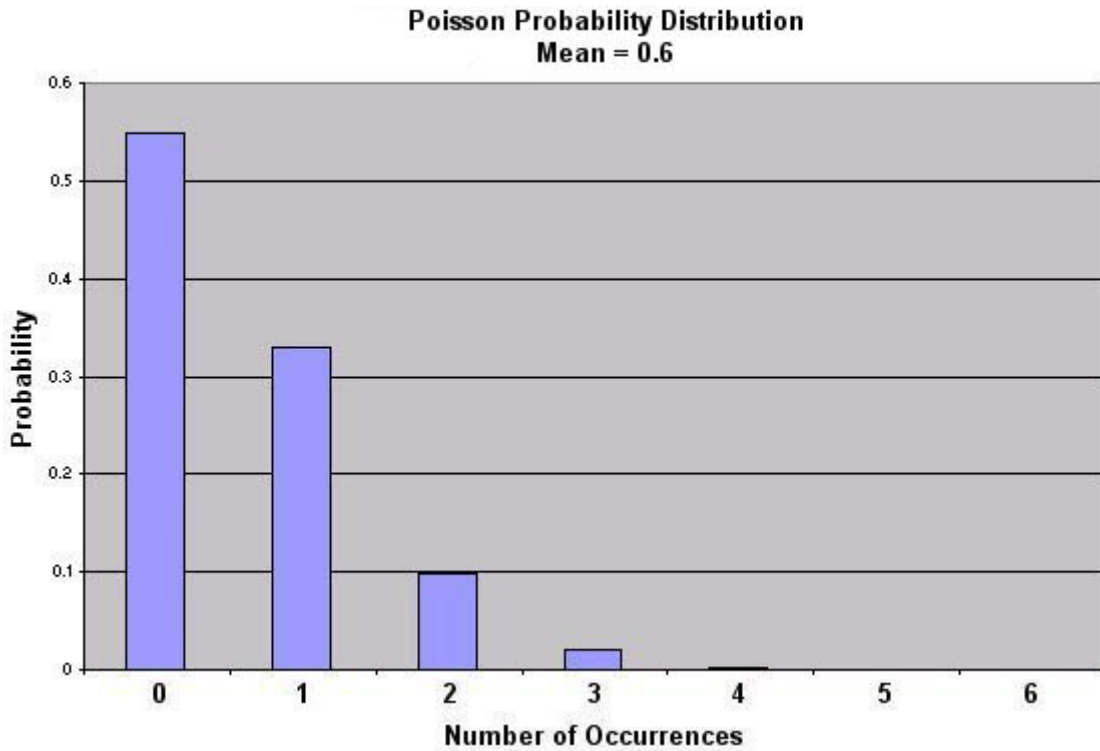
Page 133:

Figure 10.4 should look as follows:



Page 133:

Figure 10.5 should look as follows:



Page 145:

The area to the left and right of the shaded region should be 0.1587 rather than 0.1584.

Page 151:

Problem 2, Part a, should read "Less than \$190,000".

Page 188:

The sentence, "This represents the variation order to order in the population" should read, "This represents the variation among orders within the population"

Page 199:

The following corrections need to be noted:

Equation in Book	Correct Equation	Equation Description
$\sigma_x^\mu = \sqrt{\frac{p_s(1-p_s)}{n}}$	$\hat{\sigma}_p = \sqrt{\frac{p_s(1-p_s)}{n}}$	Estimated Standard error of the Proportion
$p_s + z_c \sigma_x^\mu$	$p_s + z_c \hat{\sigma}_p$	Upper Limit of Proportion Confidence Interval
$p_s - z_c \sigma_x^\mu$	$p_s - z_c \hat{\sigma}_p$	Lower Limit of Proportion Confidence Interval

Page 237:

Figure 16.15 should have the right tail of the normal distribution curve shaded so that the total area of the shaded regions equals 0.337.

Page 247:

In the Summarized Battery Data table, the Sample Standard Deviations are reversed for the two populations (Long-lasting = 7.31 and Regular = 6.40).

Page 249:

The value of alpha in the second line should be equal to 0.01 rather than 0.10.

Page 296:

The values for the correlation coefficient, r, at the bottom of the page should be equal to +1.0 and -1.0 rather than +10 and -10.

Page 297:

In the third column in the table (labeled Grade xy), the second value should be 475 and the third value should be 368. The numbers are transposed in the current text.

Page 318:

The correct solution to Problem 5 is:

5		8
6		0268
7		222455899
8		1123455566689
9		125688999

Page 318:

The Mode for Problem 3 in Chapter 4 is equal to both 36 and 27.

Page 320:

The solution for Problem 2 should read, "Range = 90 - 75 = 15".

Page 324:

The following correction needs to be noted:

Equation in Book	Correct Equation
$\sigma^2 = \left(\sum_{i=1}^n x_i \cdot P[x_i] \right) - \mu^2 = 2.325 - (1.149)^2 = 1.005$	$\sigma^2 = \left(\sum_{i=1}^n x_i^2 \cdot P[x_i] \right) - \mu^2 = 2.325 - (1.149)^2 = 1.005$

Page 332:

The solution for Problem 1 in Chapter 16 should read, "Because p-value \leq alpha".

Page 336:

On the first line, the critical value of the chi-square statistic is incorrectly shown as 12.592. It should be 11.070.

Critical Statistic in Book	Correct Critical Statistic
$\chi_c^2 = 12.592$	$\chi_c^2 = 11.070$