

# Textbook Errata

Warren Ewens and Katherine Brumberg

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Errata for the textbook “Statistical Theory for Data Analysis: an Introduction” will be posted here as they are received.

Please email Katherine at [kbrum@wharton.upenn.edu](mailto:kbrum@wharton.upenn.edu) if you believe there is an error in the book and it will be added.

p.75 Equation 6.37) The rightmost portion of the inequality containing  $\bar{X}$  a second time should not be there. The equation should read  $\text{Prob}(\mu - \frac{1.96\sigma}{\sqrt{n}} < \bar{X} < \mu + \frac{1.96\sigma}{\sqrt{n}}) \approx 0.95$ .

p.199 Problem 13.2) In part a, the specifications of  $\mu = 5$  and  $\mu \neq 5$  for the null and alternative hypotheses should be  $\mu = 15$  and  $\mu \neq 15$ .

p. 230 Solution to problem 3.7c) The probabilities subbed into the denominators of the conditional probability formulas were accidentally flipped. Here is a corrected version:

$$\text{Prob}(L|O) = \frac{\text{Prob}(L \cap O)}{\text{Prob}(O)} = \frac{0.26}{0.6} = \frac{13}{30}. \text{ Prob}(O|L) = \frac{\text{Prob}(L \cap O)}{\text{Prob}(L)} = \frac{0.26}{0.3} = \frac{13}{15}.$$

Since  $\text{Prob}(L|O) \neq \text{Prob}(L)$  (and similarly  $\text{Prob}(O|L) \neq \text{Prob}(O)$ ), the two events are not independent.

p. 232 Solution to problem 4.4) In the possible orders, THHHT is listed twice and THTHH is not listed.

p. 242 Solution to problem 6.13b) One zero has been omitted under the square root sign, reading  $\sqrt{0.0005}$  instead of  $\sqrt{0.00005}$ . The solution itself is correct.