

Errata for Chapter 6

- Correction to notation in Example 8. It should be written

$$\chi_{.95,3}^2 = 7.815,$$

- Correction to part b) of Example 9, page 34.

b) What is the p -value if there are 12 matches out of 150? Use the normal approximation again. First using a continuity correction

$$\begin{aligned} \mathbb{P}(150\hat{p} \geq 12) &= \mathbb{P}(150\hat{p} \geq 11.5) \\ &= \mathbb{P}\left(20\sqrt{(150/19)}(\hat{p} - .05) \geq 20\sqrt{150/19}(11.5/150 - .05)\right) \\ &\approx \mathbb{P}(Z \geq 1.50) = 0.0668. \end{aligned}$$

- Text to replace gibberish following equation (6.19) on page 32.

This definition does not cover alignments with gaps (also called indels). We will see in Chapter 7 how it can be extended to gapped alignments as well by assigning a “penalty” to the alignment of a letter with a gap.