ERRATA FOR
A FIRST COURSE IN ABSTRACT ALGEBRA: RINGS, GROUPS, AND FIELDS, 3RD EDITION

LAST UPDATED: 4 MARCH 2019.

- p. 117. Exercise 17c: "...at these two roots are both positive..." should be "...at these two roots are both the same sign..."
- p. 143. line -3: "...$I + a = I + c$..." should be "...$I + a = I + b$...".
- p. 303. Exercise 10: "...Example 25.6..." should be "...Example 24.6...".
- p. 308. Example 28.3, 3rd paragraph, 4th sentence should read; "Then the three elements $\iota, (123)$, and (132) all perform the action of the identity permutation on X, while the elements $(12), (23)$, and (13) all correspond to the action which interchanges the two elements of X."
- p. 312. Exercise 4: "...$U(M_2(\mathbb{Z}))$..." should be "...$U(M_2(\mathbb{R}))$...".
- p. 316. Proof of Theorem 29.1, 2nd sentence: "...of order k..." should be "...of order p^k...".
- p. 316. Proof of Theorem 29.1, 1st displayed equation: "Fix(G/H)" should be "Fix(H)".
- p. 317. Proof of Theorem 29.4, displayed equation: "Fix(G/P)" should be "Fix(Q)".
- p. 328. Historical Remarks. We refer to Exercise 3; it should be Exercise 4.
- p. 329. Exercise 30.d: 12 should be 20. (See errata on page 515.)
- p. 431. Exercise 10: "...min-imial..." should be "...min-imal...".
- p. 448. Proof of Theorem 44.3, 2nd paragraph, 2nd line: "...$[K(\beta) : F(\gamma)]$..." should be "...$K(\beta) : F(\beta)]$...".
- p. 448. Proof of Theorem 44.3, displayed equation: "...$[K(\beta) : F(\gamma)][F(\gamma) : F]$..." should be "...$[K(\beta) : F(\beta)][F(\beta) : F]$...".
- p. 457. proof of Theorem 45.4, displayed expression should be "$\mathbb{Z}_{{q_1}^{k_1}} \times \mathbb{Z}_{{q_2}^{k_2}} \times \cdots \times \mathbb{Z}_{{q_r}^{k_r}}$"
- p. 515. Exercsie 29.7: "...Sylow 2-subgroup." should be "...Sylow p-subgroup.".
- p.515. Exercise 30.d: should read "By the Third Sylow Theorem, there is 1 Sylow 5-subgroups, which is abelian, being cyclic of order 5. Call it H. G/H is of order 2^2 and so abelian."