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ERRATA  
FOR  
Shahriar Shahriari, *Algebra in Action, A Course in Groups, Rings, and  
Fields*, AMS, 2017.

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- Page 11, line 2 of Example 1.14, replace both instances of “ $\mathbb{R}^2$ ” with “ $\mathbb{R}^2 - \{(0, 0)\}$ ”.
- Page 11, Figure 1.8, replace “ $\mathbb{R}^2$ ” with “ $\mathbb{R}^2 - \{(0, 0)\}$ ”.
- Page 19, line 2 of Definition 1.33, replace “the *left inverse*” with “a *left inverse*”.
- Page 19, Problem 1.2.13, replace “the *left inverse*” with “a *left inverse*”.
- Page 35, line 3 of Problem 1.5.6, replace “ $\{\lambda I_n \mid \lambda \in F\}$ , the set of matrices that” with “ $\{\lambda I_n \mid \lambda \in F - \{0\}\}$ , the set of non-zero matrices that”
- Page 55, line 2 and line 4, in three instances, there is an extra small “(” after  $\phi$  that should be removed.
- Page 59, line 3 of Example 2.57, replace “every element” with “every non-identity element”.
- Page 76, line 7, replace “elements” with “element”.
- Page 76, line 2 of part (b) of Proof to Lemma 3.2, eliminate an unnecessary space by replacing “repeatedly” with “repeatedly”.
- Page 106, Problem 4.5.4, in two places replace “ $ax^2 + bxy + cx^2$ ” with “ $ax^2 + bxy + cy^2$ ”.
- Page 110, line -1, replace “have” with “has”.
- Page 115, Statement of Corollary 5.14, replace “ $|G| < \infty$ , a” with “ $G$  be a finite”.
- Page 117, line 11 of Remark 5.18, replace “an spectrum” with “a spectrum”.
- Page 123, line 2 of Problem 5.3.5, replace the question mark with a period.
- Page 141, line 4 of Problem 6.3.4, replace “ $\alpha \cdot g$ ” with “ $g \cdot \alpha$ ”
- Page 145, line -1 of footnote, replace “al-Karaji’s” with “al-Karaji’s”
- Page 210, line 4 of Definition 11.2, replace “if  $\phi$  is a 1-1” with “if  $\phi$  is 1-1”.
- Page 211, line 15 of Example 11.6, replace the second period with a question mark so as to have “Is there a  $g \in G$  with  $\phi_x(g) = h$ ?”
- Page 225, line 6 of Example 11.34, replace “page 160” with “page 159”.
- Page 245, Problem 11.7.10, replace “no finite (abelian) group” with “no non-trivial finite (abelian) group”.
- Page 252, line 2 of Example 12.5, replace “ $S$ ” with “ $G$ ”.
- Page 371, line 1 of Problem 18.1.32, replace “ $a, b \in R$ ” with “ $a, b \in R$ , with neither element dividing the other”
- Page 443, line 2 of Problem 20.1.6, replace “ $p \neq a^2 - 6b^2$ ” with “ $p \neq \pm(a^2 - 6b^2)$ ”.
- Page 466, Problem 22.2.4, replace all three instances of “ $\mathbb{R}$ ” with “ $\mathbb{Q}$ ”.
- Page 586, line 5 of the subsection **Algebraic Closure of  $\mathbb{F}_q$** , replace “ $\overline{R}$ ” with “ $\overline{\mathbb{R}}$ ”.
- Page 586, line 6 of the subsection **Algebraic Closure of  $\mathbb{F}_q$** , replace “ $\overline{Q}$ ” with “ $\overline{\mathbb{Q}}$ ”.
- Page 620, Short Answer to Problem 19.1.4, replace “No” with “Yes”.
- Page 626, line 6 of solution to Problem 2.4.9, replace “ $a^{-1} = a^3$ ” with “ $a^{-1} = a^2$ ”.
- Page 629, line 2 of solution to Problem 5.2.15, replace “ $U \cap V \leq U \leq G$ ” with “ $U \cap V \leq V \leq G$ ”.
- Page 631, line 4 of solution to Problem 7.3.7, replace “Lemma 7.3.5” with “Problem 7.3.5”.