Errata for the Fifth Edition of
Ideals, Varieties, and Algorithms
October 31, 2025

Page 56, Lemma 2: "An order relation $>$" should be "A total order $>$"

Page 235, part (b) of Exercise 13: Replace "$\mathbf{V}(\mathrm{Per}_{2,2,3})$" with "$\mathbf{V}(\mathrm{Per}_{2,2,3}) \subseteq \mathbb{C}^6$"

Page 363, part (c) of Exercise 20: Replace the first two lines with the following:

"To understand why we need both Q_1 and Q_2, suppose that $f(x)$ has three distinct roots in a field L containing $\mathbb{Q}$. There are $6 = 3!$ ways to order the roots as $\alpha_1, \alpha_2, \alpha_3$. Prove that for any of these six orderings, we have"

Page 363, part (c) of Exercise 20: At the end of part (c), add "Hint: Set $x_i = \alpha_i$ in the formula for D in Example 9 and note that $f(x) = (x - \alpha_1)(x - \alpha_2)(x - \alpha_3)$."

Page 430, Exercise 16: At the end of line 6, add: "This means that $X_{\mathcal{A}}$ is the smallest projective variety containing the image of $\Phi_{\mathcal{A}}$."