

Errata—*An Introduction to Algebraic Geometry* by Kenji Ueno

Line -2 means 2^{nd} line up from the bottom of the page.

- p. 7, line -2 : $\tilde{q}(X, Y)$ should be $\tilde{q}(x', y')$
- p. 13, line -8 : $(0, \beta : -\alpha)$ should be $(0 : \beta : -\alpha)$
- p. 14, line 18: $(a_0, a_1 : a_2) \in U_0$ should be $(a_0 : a_1 : a_2) \in U_0$
- p. 14, line 20: $(1 : x_0, y_0)$ should be $(1 : x_0 : y_0)$
- p. 19, line -4 : $\frac{x_0^2}{b^2}$ should be $\frac{x_2^2}{b^2}$
- p. 23, line 4: $a_1 \neq 0$ should be $a_0 \neq 0$
- p. 28, line -14 : $\frac{u'_0}{u'_1}$ should be $\frac{u'_1}{u'_0}$
- p. 28, line -3 : $\in \mathbf{C}$ should be $\in C$
- p. 29, line 5: $\frac{a_1 - a_0}{a_2}$ should be $\frac{a_0 - a_1}{a_2}$
- p. 31, line 14: $\lambda^{m-2} \mu^2 \Delta_b^{(2)} F(a)$ should be $\frac{\lambda^{m-2} \mu^2}{2} \Delta_b^{(2)} F(a)$
- p. 31, line -11 : correction similar to above
- p. 31, bottom line: correction similar to above
- p. 36, line -6 : $= (n+2)(n+3)/2$ should be $= (n+2)(n+1)/2$
- p. 38, line -7 : $f(x_0, x_1, x_2)$ should be $F(x_0, x_1, x_2)$
- p. 41, line 14: in $\mathbf{P}^2(\mathbf{C})$ corresponds should be in $\mathbf{P}^2(\mathbf{C})^*$ corresponds
- p. 43, line 8: $(\mathbf{P}^2(\mathbf{C})^2)^*$ should be $\mathbf{P}^2(\mathbf{C})^*$
- p. 51, line 4 $\bigcup\{(0 : 1)\}$ should be $\bigcup\{(1 : 0)\}$
- p. 52, line 3 of Figure 2.2: your will should be you will
- p. 56, line 4: U_1 should be U_0
- p. 56, line 4: in U_0 should be U_1
- p. 56, line 9: $x^i x^j$ should be $x_0^i x_1^j$
- p. 70, line 3: as should be at
- p. 70, line -9 : a_2^2 should be a_1^2
- p. 70, line -3 : $(b_0; b_1)$ should be $(b_0 : b_1)$
- p. 70, bottom line: $(x_0 : x_1; x_2)$ should be $(x_0 : x_1 : x_2)$
- p. 72, line 11: $(1 : 0 : 1)$ should be $(1 : 0 : 0)$
- p. 74, lines 7, 8, 9: $(a_0 : a_1 : a_2)$ should be (a_1, a_2, a_2)
- p. 74, line 10: a_o^{d-1} should be a_0^{d-1}
- p. 75, line -3 : $x_2^2 b^2$ should be $\frac{x_2^2}{b^2}$

- p. 79, line 11: point with multiplicity should be point at $(0, 0)$ with multiplicity
- p. 81, line 2: $y-$ should be $y+$ (for one of the factors, preferably the second one—see p. 83)
- p. 83, bottom line: $3/2s^4$ should be $(3/2)s^4$
- p. 84, line 2 after Figure 2.10: $\mathbf{P}(\mathbf{C})^2$ should be $\mathbf{P}^2(\mathbf{C})$
- p. 84, line 12 after Figure: $a_j y_j$ should be $a_j y_j^j$
- p. 88, annotation to Figure 2.12(b): $E: y^2 = y^3$ should be $E: y^2 = x^3$
- p. 90, line -6: g_2^2- should be g_2^3-
- p. 90, line -2: to \mathbf{C} should be to C
- p. 91, line 5: denominator of LHS $c(x) - d(x, y)$ should be $c(x) + d(x)y$
- p. 93, line -5: after: x_n insert: of degree m
- p. 97, line -6: g_j should be G_j
- p. 98, line 13 (equation): H_j should be F_j
- p. 99, line -6: $(G \pm H)^{m_1+n_2}$ should be $(G \pm H)^{m_1+m_2}$
- p. 99, line -4: (II) should be (I1)
- p. 100, line -17: $V(a_\lambda)$ should be $V(\mathfrak{a}_\lambda)$
- p. 100, line -4: $F \in$ should be $G \in$
- p. 102, line -7: \mathbf{P}^{n_1} should be \mathbf{P}^{n-1}
- p. 102, line -6: \mathbf{P}^{n_1} should be \mathbf{P}^{n-1}
- p. 104, line -3: $z_2 = z_1 z_2$ should be $z_2 = z_1^2$
- p. 105, line -18: $\mathbf{C}(x)$ should be $\mathbf{C}(X)$
- p. 105, line -5: z_1 should be z_i (to include the cases for $i = 1, 2, 3$)
- p. 105, line -5: x_1/x_0 should be x_i/x_0
- p. 107, line 9: F should be F_j
- p. 107, line 12 after: of the insert: d -dimensional (since the Definition as it stands refers to rank $n - d$, but there has been no prior mention of d)
- p. 108, line 9 (two corrections in this): $-x_0^{l-2} x_1 \frac{\partial f}{\partial z_1}(\frac{x_1}{x_0}, \frac{x_2}{x_0})$ should be $-x_0^{l-2} x_2 \frac{\partial f}{\partial z_1}(\frac{x_1}{x_0}, \frac{x_2}{x_0})$
- p. 108, line -2: a_N should be a_n
- p. 109, line 12: a_N should be a_n
- p. 115, line 12: $)$ (should be $),$ (
- p. 115, line 13: is surjection should be is a surjection
- p. 115, line -16: \mathbf{P}^2 should be \mathbf{P}^1
- p. 115, line -11: $(\alpha t, \beta t)$ should be $(\alpha t: \beta t)$
- p. 116, line 2 after Figure: $\bar{\omega}^1$ should be $\bar{\omega}^{-1}$
- p. 116, line 11 after Figure: $(\alpha, \beta) \in \mathbf{P}^2$ should be $(\alpha, \beta) \in \mathbf{P}^1$
- p. 117, line 16: $\tilde{\mathcal{U}}_1 \cup \tilde{\mathcal{U}}_2$ should be $\tilde{\mathcal{U}}_0 \cup \tilde{\mathcal{U}}_1$
- p. 117, line 17: $\in \tilde{\mathcal{U}}$ should be $\in \tilde{\mathcal{U}}_0$
- p. 117, line 21: onto $\in \tilde{\mathcal{U}}_0$ should be $\in \tilde{\mathcal{U}}_0$
- p. 118, line 15: consider $\tilde{\mathcal{U}}_0$ should be consider $\tilde{\mathcal{U}}_0$
- p. 118, line 16: consider $\tilde{\mathcal{U}}_1$ should be consider $\tilde{\mathcal{U}}_1$

- p. 118, line 20: of U should be of \mathcal{U}
- p. 118, line 21: $\}$ should be $\}$,
- p. 118, line 25: $\{(0, 0)\}$ should be $\{(1, 0, 0)\}$
- p. 120, line 1: $(M - \{p\}$ should be $(M - \{p\})$
- p. 120, line -4: $\tilde{\mathcal{U}}$ should be $\tilde{\mathcal{U}}_0$
- p. 121, line 4: $= \Sigma$ should be $= z^n \Sigma$
- p. 121, line -11: $i \geq 0$ should be $j \geq 0$
- p. 125, annotation to Figure 2.18(b): \tilde{E} should be \tilde{C}
- p. 127, line 2: f^2 should be t^2
- p. 127, line -12: a the origin should be at the origin
- p. 127, line -3: $y = \frac{x_1}{x_0}, z = \frac{x_2}{x_0}$ should be $y + \frac{x_1 x}{x_0}, z = \frac{x_2 x}{x_0}$
- p. 136, line -10: higher should be higher
- p. 136, line -4: $1/x^k$ should be $1/x^l$
- p. 138, line 2: $(n-2)x_0^{n-3}x_0^{n_2}x_2^2$ should be $(n-2)x_0^{n-3}x_2^2$
- p. 140, line 13: $x = u/v$ should be $x = v/u$
- p. 140, line -11: $(1: 0: \alpha_j)$ should be $(1: \alpha_j: 0)$
- p. 142, line 15: dg should be fdg
- p. 146, line 9: regular regular should be regular
- p. 146, line -8: $f_x(x, y)+$ should be $f_x(x, y)dx+$
- p. 147, line 3: $v = \frac{1}{y}$ should be $v = \frac{y}{x}$
- p. 150, line 2: (a_0^n, a_1^n) should be $(a_0^n: a_1^n)$
- p. 150, line 11: $y = y - a$ should be $y = t - a$
- p. 153, line 11 (two corrections): h_{n-q} should be h_{n-g}
- p. 155, line 8: V should be C
- p. 156, line -11: $a_3 x_0^2 x^2$ should be $a_3 x_0^2 x_2^2$
- p. 157, line -3: q_j should be g_j
- p. 160, line 14: curve should be curves
- p. 162, line -13: 0. should be O .
- p. 178, line 7: The denominator of RHS should read $(1-u)(1-qu)$