

Galois Theory For Beginners

A Historical Perspective

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List of misprints

If you are interested in the book itself (and not in the misprints) please click [here](#).

Each misprint is located in the form “ x, y ” meaning “page x , line y ”. A line $y < 0$ means “line $-y$ counted from the bottom”.

1. Misprints in formulas:

4, 6:

$$x^3 + px = q$$

4,17:

$$x^3 + px^2 = q$$

14, -9:

$$i^2 = -1$$

21, 3:

$$\cos 3\psi = \frac{3q}{2p} \frac{1}{\sqrt{-\frac{p}{3}}}$$

28, 10:

the term x_1x_5 is missing

29, -5:

$$b_0 = x_1^n + a_{n-1}x_1^{n-1} + \dots + a_1x_1 + a_0 = 0$$

35, 4:

$(n-1)$ th-degree

40, -11:

$$z^3 - \frac{p}{2}z^2 - rz + \frac{pr}{2} - \frac{q^2}{8} = 0$$

41, 2:

$$z = z_1$$

55, -3:

brackets should be removed

57, 9:

$$b \cdot h(x)$$

57, -2:

$$\frac{a}{p} \cdot g(x)$$

67, -12:

$$\eta_0\eta_1 = -4$$

68, 5:

$$z^2 - \eta_1z - 1 = 0$$

68, 13:

$$y^2 - \mu_0 y + \mu_1 = 0$$

68, 17:

$$y^2 - \beta_0 y + 1 = 0$$

71, -5, first sum:

$$\zeta^{j+ jg^{qe}}$$

72, footnote 6, 3:

$$2^{jk} + 1$$

74, -7:

circle has radius 1

83, -10:

$$x^5 - 5(mn + pq)x^3 + 5(m^2q + n^2p + mp^2 + nq^2)x^2$$

83, -8:

$$+ m^5 + n^5 + p^5 + q^5 + 5(mn - pq)(mp^2 + nq^2 - m^2q - n^2p) = 0.$$

112, 8:

$$z^3 - 12z - 8 = 0$$

112, 10:

$$\left(\frac{-8}{2}\right)^2 \text{ instead of } \left(\frac{8}{2}\right)^2$$

114, 15:

$$x^5 - 17x - 17 = 0$$

133, footnote 5, -2:

$$K(x_1, \dots, x_n)$$

139, 1:

$$g(t) \in K[t]$$

143, 3:

$$\mathcal{U} = \text{Aut}(K(x_1, \dots, x_n) | L)$$

151, 16:

$$\zeta, \zeta^2, \dots, \zeta^{n-1} \text{ for a prime number } n$$

152, -5:

$$\sum_{k=0}^{n-1} (\zeta^k, b) = nb$$

155, -8:

$$\{\text{id}, \sigma_g, \sigma_g^2, \dots, \sigma_g^{n-2}\}$$

155, -6:

from the field $\mathbb{Q}(\zeta)$

160, -3:

not solvable for $n \geq 5$

163, 3:

residue classes $a, b \in \mathbb{Z}/n\mathbb{Z}$ with $a \neq 0$, form

2. Textual misprints:

x, -16:
(1501-1576)

4, -11:
could

20, 5:
given

23, 4:
foreword

33, two last lines:
one zero—and indeed n complex zeros.

34, 17:
and then choose the number $z_1 = \dots$

34, -3:
Finally, we remark

44, 2:
? instead of “.”

49, -6 & -5:
Norwegian mathematician

53, 7:
of the solutions of the given equation

53, footnote 6, 1:
naturally

54, 8:
polynomials.

55, -8:
that, though not decomposable

55, -2:
from the quadratic equation

56, -6 & -5:
the following section

57, 8:
two positive integers a and b

60, -3:
~~once again~~

68, 8:
periods β_0 and β_4

69, footnote 4, 2:
no. 7, 1977, pp. 122-131

73, footnote 8, -1:
interesting

74, -1:
transcendental

Page 75, -9:
Disquisitiones

76, 5:
~~the~~ identical

90, 15:
quadratic

100, 4:
that preserve the polynomial

120, 5:
with the remainder polynomial

129, 7:
the *left coset* of σ

131, 13:
of order n

132, 3:
The extension of this subfield to the field of all ...

135, 17:
was known

150, 2:
assumptions

151, -17:
"if" should be replaced by "if and only if".

169, 12
the elementary symmetric polynomials

170, 7:
is not solvable for

171, 5;
subfield of the complex numbers

3. Layout:

60, 2:
 $(x - 1)$ should be written in one line.

4. Improvements:

38, -8:
$$x_{1,2} = \frac{1}{2}(x_1 + x_2) \pm \frac{1}{2}(x_1 - x_2) = \frac{1}{2}(x_1 + x_2) \pm \frac{1}{2}\sqrt{(x_1 + x_2)^2 - 4x_1x_2}$$

43, 10&11, 15
remove the lines 10 and 11. Line 15 should be changed to

instead of $\begin{pmatrix} 1 & 2 & 3 & 4 \\ 3 & 1 & 4 & 2 \end{pmatrix}$.

104, -1

105, 6, 7, 16:

replace in each line "m×m" with "m²"