

**AN INTRODUCTION TO  
THE THEORY OF NUMBERS**

Fifth Edition, Corrected Printings

by

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ERRATA AND REVISIONS FOR PRINTINGS 3 AND HIGHER

PAGE/LINE

v/-15..-6 In place of the passage ‘The instructor may ... subdirectory /pub/clint.’  
substitute:

Instructors can obtain a set of solutions to the starred exercises by contacting the third author, whose web page also provides useful software, a manual of computational laboratories, and several supplements.

- vi/11 for ‘Appendixes’ read ‘Appendices’
- 1/12,13 replace ‘natural number such as’ by  
‘natural number greater than 1 such as’
- 1/-2 replace ‘any exponent’ by ‘any integral exponent’
- 2/5 replace ‘natural numbers’ by ‘integers’
- 3/-10,-11 replace ‘is a logical consequence of the first’ by  
‘is logically equivalent to the first’
- 18/3 between ‘of’ and ‘integers’ insert ‘two or more’.
- 29/-3 replace ‘numbers  $n$ ’ by ‘numbers  $n \geq 4$ ’  
[Thanks to Art Benjamin for pointing this out.]
- 56/2 Replace ‘ $ad - bc$ ’ by ‘ $ad + bc$ ’
- 57/Exercise 14 replace ‘all  $n$ ’ by ‘all  $n \geq 0$ ’
- 88/6 replace ‘ $f'(5) = 1 \not\equiv 0 \pmod{7}$ ’ by ‘ $f'(5) = 11 \not\equiv 0 \pmod{7}$ ’  
[Thanks to Peter Kahn for pointing this out.]
- 102/1 The term ‘quadratic residue’ is defined in Definition 3.1 on page 131.
- 107/4 replace ‘ $p|(a^{2n} + 1)$ ’ by ‘ $p|(a^{2^n} + 1)$ ’
- 110/-2 The term ‘quadratic nonresidue’ is defined in Definition 3.1 on page 131.
- 137/\*22. Replace ‘ $(p + 1)^{1/2}$ ’ by ‘ $p - 1$ ’
- 157/-4 Replace ‘ $ax^2 + bxy + y^2$ ’ by ‘ $ax^2 + bxy + cy^2$ ’

## NZM corrections, continued

- 161/15 To the end of the definition append: ‘(When  $d < 0$ , we count /it only the positive definite forms.)’
- 182/1 Replace ‘*de Plignac’s formula.*’ by ‘(Legendre)’
- 195/Problem 5 Replace ‘ $2^{\omega(n)}$ .’ by ‘ $2^{\omega(n)}$ .’
- 197/-8 for ‘Slow’ read ‘Show’
- 207/13 Replace ‘permits’ by ‘permutates’
- 237/10 Replace ‘ $(-1, 1), (0, 1), (3, 11)$ ,’ by ‘ $(-1, \pm 1), (0, \pm 1), (3, \pm 11)$ ’
- 293/-20 replace ‘Section 1.1’ by ‘Section 1.2’  
[Thanks to Harley Flanders for pointing this out.]
- 308/6 Replace ‘ $\sqrt{5}$ ’ by ‘ $\sqrt[3]{5}$ ’
- 318 Between Corollary 6.27 and its proof, insert the following paragraph:

With a small amount of calculation one can show that 33 is not the sum of five positive perfect squares, but that every integer  $n$ ,  $34 \leq n \leq 169$ , is the sum of five positive squares. Hence the constant 169 in the corollary above can be replaced by 33, but not by any smaller number. [Thanks to P. T. Bateman for suggesting this.]

- 321/12 Wrong font: ‘ $\mathbf{b}f_1 = g$ ’ should be ‘ $\mathbf{bf}_1 = g$ ’
- 356/-7 Replace ‘ $x_2 = y_2\sqrt{d}$ ’ by ‘ $x_2 + y_2\sqrt{d}$ ’  
[Thanks to Greg Martin for pointing this out.]
- 448/-1 Replace ‘ $q^e(n) = q^o(n)$ ’ by ‘ $q^e(n) - q^o(n)$ ’  
[Thanks to Greg Martin for pointing this out.]