## INDEX

arithmetical hierarchy 11
axiomatization 52
$\mathrm{B}_{\mathrm{n}}$ (formula, sentence) 11
$\mathrm{B}_{\mathrm{n}}$ (degree) (see $\boldsymbol{\Phi}$ (degree))
Bernays-Löb provability
conditions 15
binumerate 7
binumeration 8
bounded (quantifier) 8, 121
bounded (set of sentences) 52, 121
cap 96
caps to ... below ... 114
cofinal 98
complement (in lattice) 20,114
complete (theory) 23
complete ( $\Pi_{\mathrm{n}}^{0}, \Sigma_{\mathrm{n}}^{0}$ set) 20
conservative (partially) 62
correctly numerates 43
Craig's theorem 10
cup 96
cupping 98
cups to ... above ... 114
$\Delta_{\mathrm{n}}$ (degree) (see $\Phi$ (degree))
$\Delta_{\mathrm{n}}$ (formula, sentence) 11
decidable (in T, formula, sentence) 8
decidable (theory) 17
define (formula defines function) 7
definable (set in model) 17
degree (of interpretability) 94
distributive (lattice) 20
dual 11
essentially infinite (over) 52
essentially reflexive (theory) 18
essentially reflexive
(interpretation) 120
essentially undecidable (theory) 17
$\Phi$ (formula, sentence) 11
$\Phi$ (degree) 102
faithful (interpretation) 84
faithfully interpretable 84
finite extension 52
fixed point 15
fixed point lemma 15,121
$\Gamma$ (degree) (see $\boldsymbol{\Phi}$ (degree))
$\Gamma$ (formula, sentence) 11
$\Gamma$-conservative 62
$\Gamma$-conservative extension 66
$\Gamma$-sound 12
$\Gamma$-subtheory 63
GB (Gödel-Bernays set theory) 124
g.l.b. (greatest lower bound) 20

Gödel's (first) incompleteness
theorem 23, 119
Gödel's second incompleteness
theorem 26, 120
Gödel-Tarski theorem 17
greatest lower bound (g.l.b.) 20
H-bounded 121
Henkin complete 78
hereditarily $\Gamma$-conservative 71
high 104
hypersimple 61
i.a. (irredundantly axiomatizable) 57
i. $\Gamma$-a. (irredundantly
$\Gamma$-axiomatizable) 58
independent (formula) 31
independent (set of degrees) 114
independent (on X over T) 44
interpretable 76
interpretation 75
interval 100
irredundant (over) 57
irredundantly axiomatizable (i.a.) 57
irredundantly $\Gamma$-axiomatizable
(i.Г-a.) 58
lattice 20
least upper bound (l.u.b.) 20
liar paradox 17
Löb's theorem 28
low 104
l.u.b. (least upper bound) 20
monoconsistent 25

N 5
N 6
numerate 7
numeration 9
$\omega$-consistent 36
Orey compactness theorem 81,123
Orey-Hájek lemma 80, 123

PA 6
$\Pi_{\mathrm{n}}$ (degree) (see $\Phi$ (degree))
$\Pi_{n}$ (formula, sentence)
(see $\Gamma$ (formula, sentence))
$\Pi_{n}$-conservative
(see $\Gamma$-conservative)
$\Pi_{n}$-sound (see $\Gamma$-sound)
partial truth-definition 18,121
p.c. (pseudocomplement) 20

Peano Arithmetic 6
positively prime (p.p.) 46
p.p. (positively prime) 46

PR (primitive recursive formula) 8

Q 6

Robinson's Arithmetic 6
Rosser sentence 24
Rosser's theorem 23
$\Sigma_{\mathrm{n}}$ (degree) (see $\boldsymbol{\Phi}$ (degree))
$\Sigma_{\mathrm{n}}$ (formula, sentence)
(see $\Gamma$ (formula, sentence))
$\Sigma_{1}$-complete 14
$\Sigma_{\mathrm{n}}$-conservative
(see $\Gamma$-conservative)
$\Sigma_{1}$-extension 97
$\Sigma_{\mathrm{n}}$-sound (see $\Gamma$-sound)
self-prover 71
Shepherdson-Smoryński fixed point theorem 51

Tarski theorem 17
theory 5
translation 75
true (sentence, theory) 6
truth-definition 17
type of independence 45
undecidable (sentence) 23
undecidable (theory) 17

ZF (Zermelo-Fraenkel
set theory) 120

