Lesson 1

1.1 Philosophy

1.2 Non-technical and Technical Texts
   1.2.1 Non-technical Texts
   1.2.2 Technical Texts

INTRODUCTION TO NUMERALS AND THE NUMERIC INDICATOR

1.3 Representation of Arabic Numerals
   1.3.1 English Braille Numerals
   1.3.2 Nemeth Code Digits

1.4 Numeric Indicator
   1.4.1 SPECIAL CASE—Segmented Numbers

THE PRACTICE MATERIAL

Practice 1A

THE MATHEMATICAL COMMA AND DECIMAL POINT

1.5 Mathematical Comma

1.6 Mathematical Decimal Point
   1.6.1 Spacing of the Decimal Point
   1.6.2 The Decimal Point and the Numeric Indicator

1.7 FORMAT: General Principles
   Practice 1B

INTRODUCTION TO SIGNS OF OPERATION

1.8 Signs of Operation
   1.8.1 Spacing with Signs of Operation
   1.8.2 Positive and Negative Numbers
   Practice 1C

INTRODUCTION TO SIGNS OF COMPARISON

1.9 Signs of Comparison
   1.9.1 Spacing with Signs of Comparison
Practice 1D
MONETARY, PERCENT, AND PRIME SIGNS
1.10 Monetary Signs
   1.10.1 Spacing with Monetary Signs
1.11 Percent and Per Mille Signs
   1.11.1 Spacing with Percent and Per Mille Signs
1.12 Prime Sign

Practice 1E
CONTINENTAL SYMBOLS
1.13 The Continental Comma
1.14 The Continental Decimal Point

Answers to Practice Material

Lesson 2
INTRODUCTION TO CODE SWITCHING
2.1 A Complete Transcription
2.2 Use of the Switch Indicators
   Practice 2A
2.3 Which Code?
2.4 Placement of Literary Punctuation
   Practice 2B
2.5 FORMAT: Keep Together—General Principle Regarding Mathematical Expressions
   Placement of the Switch Indicators
      2.5.1 Keep Together If Possible
      2.5.2 A Switch Indicator May Stand Alone on a Line if Unavoidable
      2.5.3 Switch Indicators at Page Turns
   Practice 2C
2.6 Consistency with Mathematical Symbols
   Practice 2D

THE HYPHEN AND THE DASH
2.7 The Hyphen and the Dash As Punctuation
   2.7.1 A Hyphen May Divide a Long Numeral
   2.7.2 A Hyphen May Connect Numerals
   2.7.3 A Dash Separates
   2.7.4 Hyphen, Dash, or Minus Sign?
   Practice 2E

SIGNS OF OMISSION
2.8 General Use of Signs of Omission
2.9 Ellipsis
2.10 Long Dash
2.11 General Omission Symbol
Lesson 3

MORE ABOUT PUNCTUATION

3.1 Punctuation Mode
3.2 Spacing of UEB Punctuation and Code Switch Indicators
   3.2.1 Spacing of the UEB Dash
3.3 Nemeth Braille Punctuation
   Practice 3A

PUNCTUATION IN NEMETH CODE

3.4 Background

The Punctuation Indicator

3.5 Role of the Punctuation Indicator
   3.5.1 Comparison Sign in Quotes
   3.5.2 Number in Quotes
   3.5.3 Clock Time
3.6 Punctuation with Omission Signs
   3.6.1 SPACING EXCEPTION—The Hyphen
3.7 Punctuation and Spacing of Plural or Possessive Endings
   Practice 3B
3.8 SUMMARY—Situations That Do Not Require a Punctuation Indicator

INTRODUCTION TO SIGNS OF GROUPING

3.9 Definition
3.10 Signs of Grouping with Numerals
3.11 Punctuation with Grouping Symbols
3.12 Nested Grouping Symbols

Code-Switching Considerations

3.13 "Enclosed" Technical Material
3.14 The Bigger Picture

Spacing with Signs of Grouping

3.15 Spacing Inside of the Grouping Signs
3.16 Spacing Outside of the Grouping Signs
Practice 3C
IDENTIFIERS, cont.
3.17 Code Switching and Identifiers—Maintaining Alignment
3.18 Context Decisions and Code Switching

Practice 3D
3.19 FORMAT: Keep Together—Hyphenated Expressions
3.20 FORMAT: Margins for Itemized Material with No Subdivisions—Side-by-Side Layout

Answers to Practice Material

Lesson 4

WORDS
4.1 Words in Mathematical Context
4.2 Words in Narrative
4.3 Punctuation With Words

Practice 4A

Introduction to Abbreviations
4.4 Abbreviations
   4.4.1 FORMAT: Keep Together
   4.4.2 Punctuation and Abbreviations
      4.4.2.a Abbreviations with a Related Period
   4.4.3 Spacing with Abbreviations
4.5 Numbers with Ordinal Endings

Practice 4B

Single-Word Switch Indicator
4.6 The Single-Word Switch Indicator
   4.6.1 Consider the Context
   4.6.2 Lower Wordsigns
   4.6.3 Two or More Words
   4.6.4 Switch Considerations

Switch Indicators at Page Turns, cont.
4.7 Review of "Keep Together" Considerations

Practice 4C

4.8 New Print Page

LETTERS
4.9 Single English Letters in Narrative
4.10 Single English Letters in Nemeth Code
   4.10.1 Nemeth Code Definition of "Single Letter"

Introduction to the English Letter Indicator
4.11 Use of the English Letter Indicator with a "Single Letter"
4.11.1 Capitalization of "Single Letters"
4.11.2 Punctuation of "Single Letters"
4.11.3 Mapping Notation

*Practice 4D*

4.12 Nonuse of the English Letter Indicator with a "Single Letter"
4.12.1 Comparison Sign
4.12.2 Enclosed Within Grouping Symbols
4.12.3 Unspaced Sequence of Terms
   4.12.3.a Probability Notation

4.13 Letters as Identifiers

*Practice 4E*

*Mathematical Letter Combinations*

4.14 Mathematical Letter Sequence
4.15 Capitalized Letter Sequence
4.16 Shortform Letter Combinations
   4.16.1 Use of the English Letter Indicator with a "Shortform Letter Combination"
   4.16.2 Nonuse of the English Letter Indicator with a "Shortform Letter Combination"

*Practice 4F*

*FORMAT SUMMARY #2*

*Answers to Practice Material*

**Lesson 5**

*MORE ABOUT LETTERS*

*Variables*

5.1 Mathematical Variables
   5.1.1 *FORMAT*: Keep Together
   5.1.2 Abbreviation or Variable?

*Practice 5A*

*Roman Numerals*

5.2 Letter or Numeral?
5.3 Transcribing Roman Numerals in Mathematical Context
   5.3.1 Roman Numerals Consisting of Lowercase Letters
   5.3.2 Roman Numerals Consisting of One Capital Letter
   5.3.3 Roman Numerals Consisting of Two or More Capital Letters
   5.3.4 Punctuation with Roman Numerals
   5.3.5 Nonuse of the English Letter Indicator with Roman Numerals
   5.3.6 Possessive Endings
   5.3.7 Large Roman Numerals

5.4 Roman Numerals Used as Identifiers
5.5 Mathematical Letter Combinations Similar to Roman Numerals

Practice 5B

Non-Decimal Bases

5.6 Letters Used to Represent Numerals in Non-Decimal Bases

5.6.1 Transcriber’s Note Required

5.7 Non-Alphabetic Symbols Used to Represent Numerals

Practice 5C

OTHER ALPHABETS

5.8 Alphabetic Indicators

5.8.1 Code Switching and Use of Letter Indicators

5.8.2 Capitalization and Punctuation

5.9 Greek Alphabet

Greek Alphabet Table

5.9.1 Code Switching with Greek Letters

5.9.2 Alternate Form of Greek Letters

Practice 5D

5.10 German Alphabet

5.11 Hebrew Alphabet

5.12 Russian Alphabet

Practice 5E

5.13 A Sequence of Unspaced Letters

5.13.1 Derivatives

5.14 Mathematical Constant

Practice 5F

ENCLOSED LISTS

5.15 SPECIAL CASE—Definition of "Enclosed List"

5.15.1 Nonuse of the Numeric Indicator in an "Enclosed List"

5.15.2 Nonuse of the English Letter Indicator in an "Enclosed List"

5.15.3 FORMAT: Keep Together

5.15.3.a Division Between Lines

Practice 5G

MORE ABOUT ENGLISH LETTERS

5.16 English Letters and Grouping Symbols

5.17 English Letters and Endings

Practice 5H

MORE ABOUT ABBREVIATIONS

5.18 More Spacing Rules

5.18.1 Spacing of Abbreviations With Operation Signs

5.18.2 Spacing of Omission Symbols

5.19 Single-Letter Abbreviations

5.20 Abbreviations Whose Letters Correspond to a Shortform

5.21 Context Clues
5.22 Fully Capitalized Acronyms
5.23 UEB vs. Nemeth Code

CODE SWITCHING, cont.
5.24 Placement of Switch Indicator Before Itemized Material
   Practice 5I

Answers to Practice Material

Lesson 6

SIGNS OF OPERATION, cont.
6.1 Review of Signs of Operation
6.2 Signs of Operation Using Plus and Minus
6.3 Signs of Operation That Look Like Literary Symbols
   6.3.1–6.3.6 Ampersand; Asterisk; Crosshatch; Dagger and Double Dagger; Paragraph Mark; Section Mark
   Practice 6A
6.4 Signs of Operation Unique to Mathematics
   6.4.1–6.4.12 Slash; Back Slash; Dot; Hollow Dot; Intersection; Logical Product; Logical Sum; Minus With Dot Over; Tilde; Union; Vertical Bar; Negated Vertical Bar

FORMAT: SIMPLE TABLES
6.5 Introduction to Table Format
   Practice 6B

SIGNS OF COMPARISON, cont.
6.6 Review of Signs of Comparison
6.7 More Signs of Comparison
   6.7.1–6.7.16 Greater Than With Curved Sides; Less Than With Curved Sides; Arc, Concave Upward; Arc, Concave Downward; Equivalence; Identity (Triple Bar); Inclusion; Membership; Parallel To; Perpendicular To; Relation; Reverse Inclusion; Reverse Membership; Tilde as a Sign of Comparison; Variation; Vertical Bar
   6.7.16.a Colon Meaning "Such That"
   Practice 6C
6.8 Signs of Comparison Compounded Vertically
   6.8.1–6.8.9 Greater Than Or Equal To; Inclusion; Intersection; Less Than Or Equal To; Logical Product; Logical Sum; Reverse Inclusion; Tilde; Union
   Practice 6D
6.9 Signs of Comparison Compounded Horizontally
   6.9.1–6.9.2 Greater Than; Less Than
6.10 Negated Signs of Comparison
   Practice 6E
FORMAT: INSTRUCTIONS

6.11 Margins for Instructions Preceding Itemized Material (5-3)
   6.11.1 Code Switching and Instructions

6.12 Not "Instructions"
   6.12.1 Margins for Instructions Preceding Unitemized Material (3-1)
   6.12.2 Itemized Instructions
   6.12.3 Margins for Narrative Preceding Itemized Material (3-1)

Practice 6F

Answers to Practice Material

Lesson 7

TYPEFORMS
   7.1 Introduction to Typeforms

LETTERS AND NUMERALS
   7.2 Determining Significance of a Variant Typeform

THE FOUR MATHEMATICAL TYPEFORM INDICATORS
   7.3 Mathematical Typeforms and Their Indicators
   7.4 Boldface, Italic, Script, and Sanserif Type for Letters and Numerals
   7.5 Typeform Indicators with One Letter
      7.5.1 Recognition of Script Type in Other Alphabets
   Practice 7A
      7.5.2 Script Letter of Special Interest
      7.5.3 Boldface Letters of Special Interest—Vectors
      7.5.4 Boldface Letters of Special Interest—German Letters
   7.6 Typeform Indicators with One Numeral
      7.6.1 Boldface Zero
   7.7 Nonregular Typeform next to Signs of Grouping
      7.7.1 Nonregular Typeform in an Enclosed List
      7.7.2 Nonregular Typeform in Contact with a Grouping Symbol
   Practice 7B

Typeform Indicators with More Than One Letter or Numeral
   7.8 More Than One Letter
   7.9 More Than One Numeral

Other Details
   7.10 Underlining and Other Typeforms
   7.11 Termination of a UEB Typeform Passage
      7.11.1 Capitalization
   7.12 Context Clues
      Practice 7C

BOLDFACED MATHEMATICAL SYMBOLS
   7.13 Dots 456
7.13.1 Signs of Operation in Boldface Type
7.13.2 Equals Sign in Boldface Type
7.13.3 Grouping Signs in Boldface Type
    Practice 7D

**COMPOUND EXPRESSIONS**
7.14 Definition of "Compound Expression"
    7.14.1 Extent of Capitalization
    7.14.2 Hyphen Followed by a Number

7.15 Typeform Indicators in Compound Expressions
    Practice 7E

*Typeform Summary*

**UNSPACED NUMBER/LETTER COMBINATIONS**
7.16 Number/Letter Combinations Without Hyphens

**REVISITING THE NUMERIC INDICATOR**
7.17 Summary of the Numeric Indicator
    Practice 7F

**FORMAT**
7.18 Margins for Itemized Material with Subdivisions (1-5; 3-5)
    7.18.1 Paragraphs Within Itemized Material with Subdivisions (7-5)
    7.18.2 Side-by-Side Option
    Practice 7G
    7.18.3 Tabular Form
        7.18.3.a When to Retain Column Format
        7.18.3.b When Not to Retain Column Format

7.19 Margins for Exercise Sets

*Answers to Practice Material*

**Lesson 8**

**LEVEL INDICATORS**
8.1 Definition

*Superscripts*
8.2 Superscript Level Indicator
    8.2.1 Abbreviations with Superscripts
        Practice 8A

8.3 Returning to the Baseline Level
8.4 Raised Hollow Dot
    Practice 8B

*Introduction to the Baseline Indicator*
8.5 Function of the Baseline Indicator
    8.5.1 Abbreviations with Superscripts
        Practice 8C
8.6 Higher Levels of Writing
   8.6.1 Combinations

8.7 Certain Raised Signs
   8.7.1 Raised Ordinal
   8.7.2 Prime Sign
   8.7.3 Apostrophe-s
   *Practice 8D*

*Subscripts*

8.8 Subscript Level Indicators
   *Practice 8E*

8.9 Returning to the Baseline Level
   *Practice 8F*

8.10 SPECIAL CASE—Nonuse of the Subscript Level Indicator
   8.10.1 Further Conditions
   8.10.2 Restrictions
   8.10.3 Rewind
   8.10.4 Summary
   *Practice 8G*

8.11 Spaces Within Superscripts and Subscripts
   8.11.1 Comma
   8.11.2 Words
   8.11.3 Comparison Signs
   8.11.4 Ellipsis or Long Dash in Superscripts and Subscripts
   8.11.5 Ellipsis or Long Dash on the Baseline of Writing
   8.11.6 Segmented Numbers
   *Practice 8H*

*More about Superscripts and Subscripts*

8.12 Superscript and Subscript Combinations
   *Practice 8I*

8.13 Left Subscripts and Superscripts
   8.13.1 Raised Negative Sign
   8.13.2 More About the Temperature Abbreviations F (Fahrenheit) and C (Centigrade)

8.14 Further Combinations
8.15 Consecutive Superscripts and Consecutive Subscripts
8.16 Simultaneous Superscripts and Subscripts
8.17 Nonsimultaneous Superscripts and Subscripts
8.18 Detached Superscripts and Subscripts
8.19 Literary Symbols and Level Indicators

*Summary*

   *Practice 8J*

*GROUPING SIGNS, cont.*

8.20 Review of Rules
8.21 Grouping Symbols and Level Indicators
8.22 Grouping Symbols with Super/Subscripts
8.23 More Signs of Grouping
8.24 Transcriber-Devised Grouping Symbols
    Practice 8K

**INTRODUCTION TO DISPLAYED MATHEMATICAL EXPRESSIONS**

8.25 Displayed Mathematical Expressions
    8.25.1 Placement of Code Switch Indicators
    8.25.2 Look for Context Clues
    8.25.3 Instructions with Displayed Material

8.26 Displayed Narrative Material
    Practice 8L

*Answers to Practice Material*

**Appendices**
Appendix C  Nemeth Code Format Summaries (Lessons 1-8)

MORE TO COME