JUNGLE BOOKS:
UEB MATH/SCIENCE & UEB WITH NEMETH

SERIES: Come back to me, braille!
Part 3 of 5

AMERICAN
PRINTING
HOUSE

Fellow travelers: Dawn and Kyle!

The Beautiful Jungles

Poll Question 1

Poll #1

What code or code combination do you usually use when transcribing math/science?

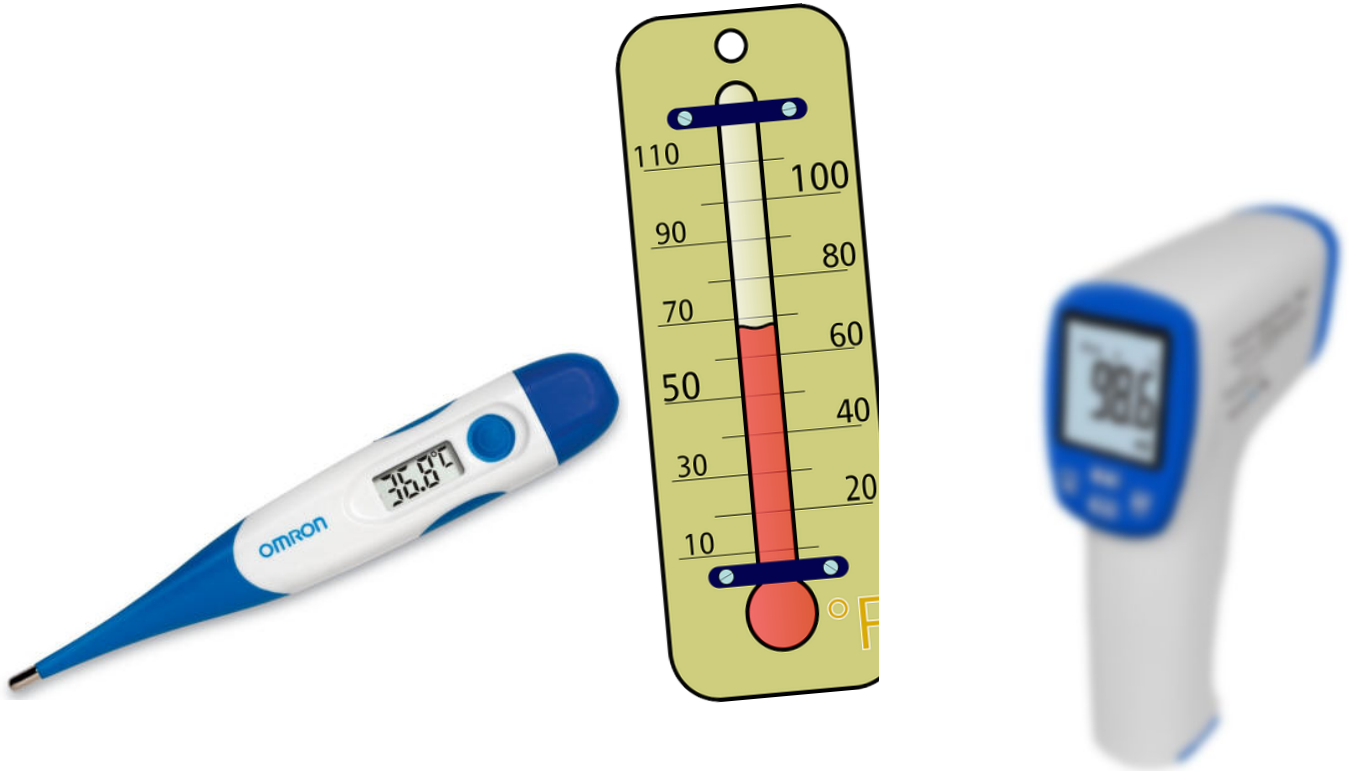
A. UEB Math/Science
B. UEB with Nemeth

NEMETH CODE

Nemeth Code Characteristics

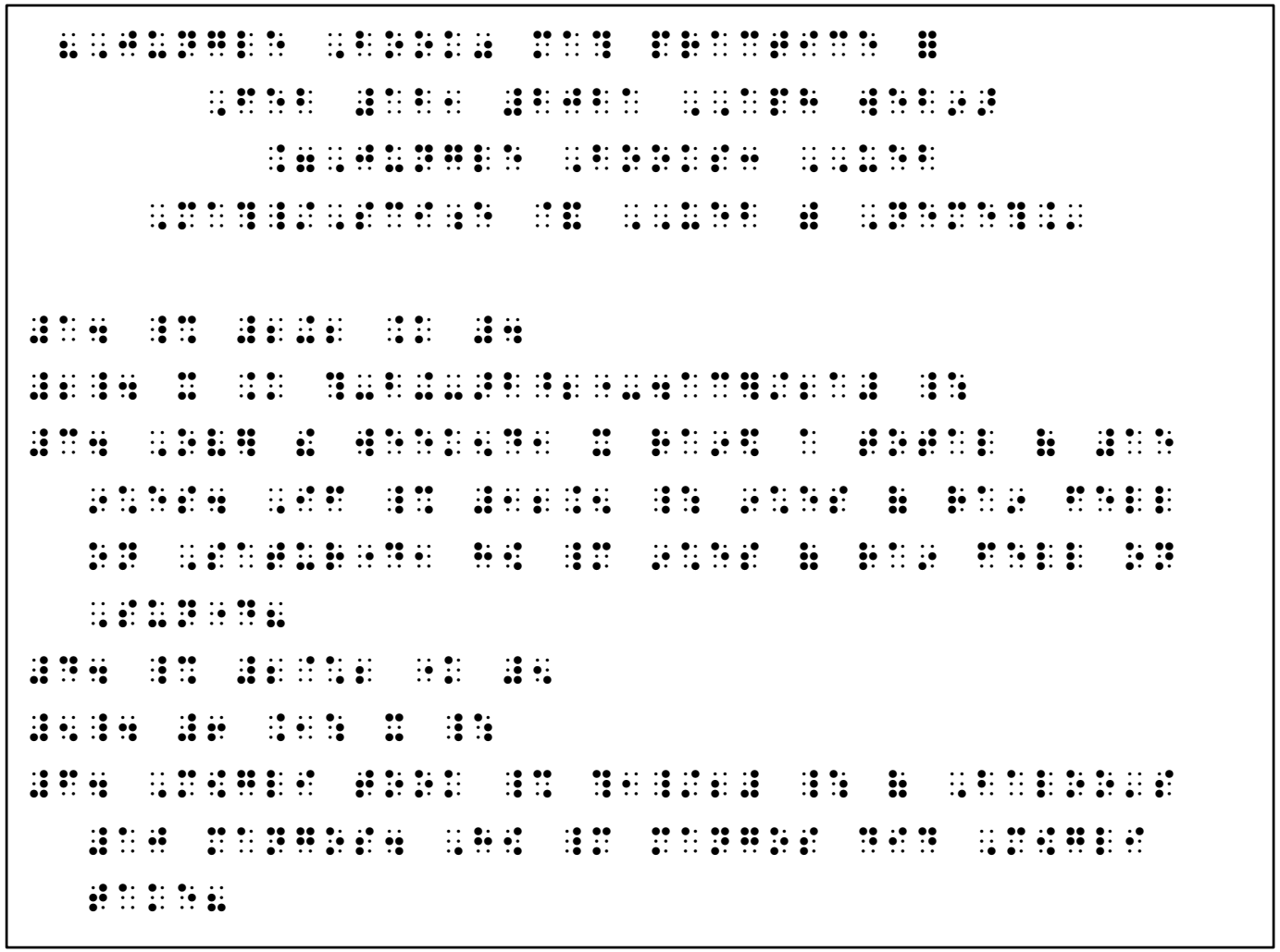
according to Kyle

- Consistent
- Concise
- Meaning-based



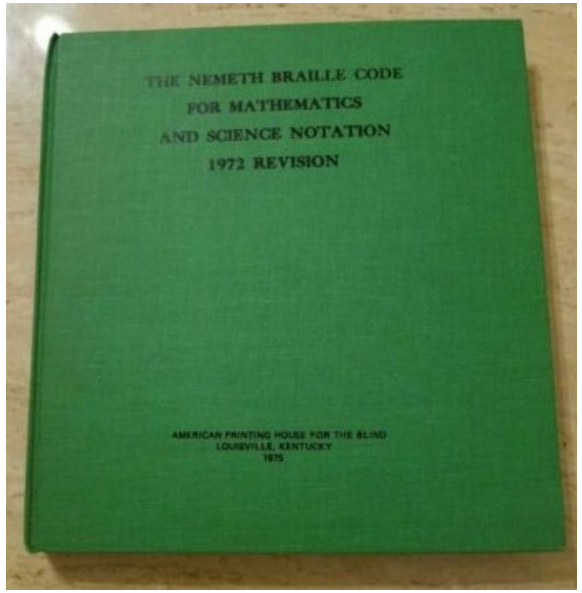
Read Jungle Books Practice Transcription, UEB with Nemeth

Jungle Books UEB with Nemeth Key



Primary Sources for UEB with Nemeth

- BANA's page on the Nemeth Code, includes
  - scan of the typeset Nemeth Code
  - updates to the code
  - guidance for use with UEB
  - BRFs of all the above
- "The Green Book" ***if*** the following are added
  - updates
  - guidance

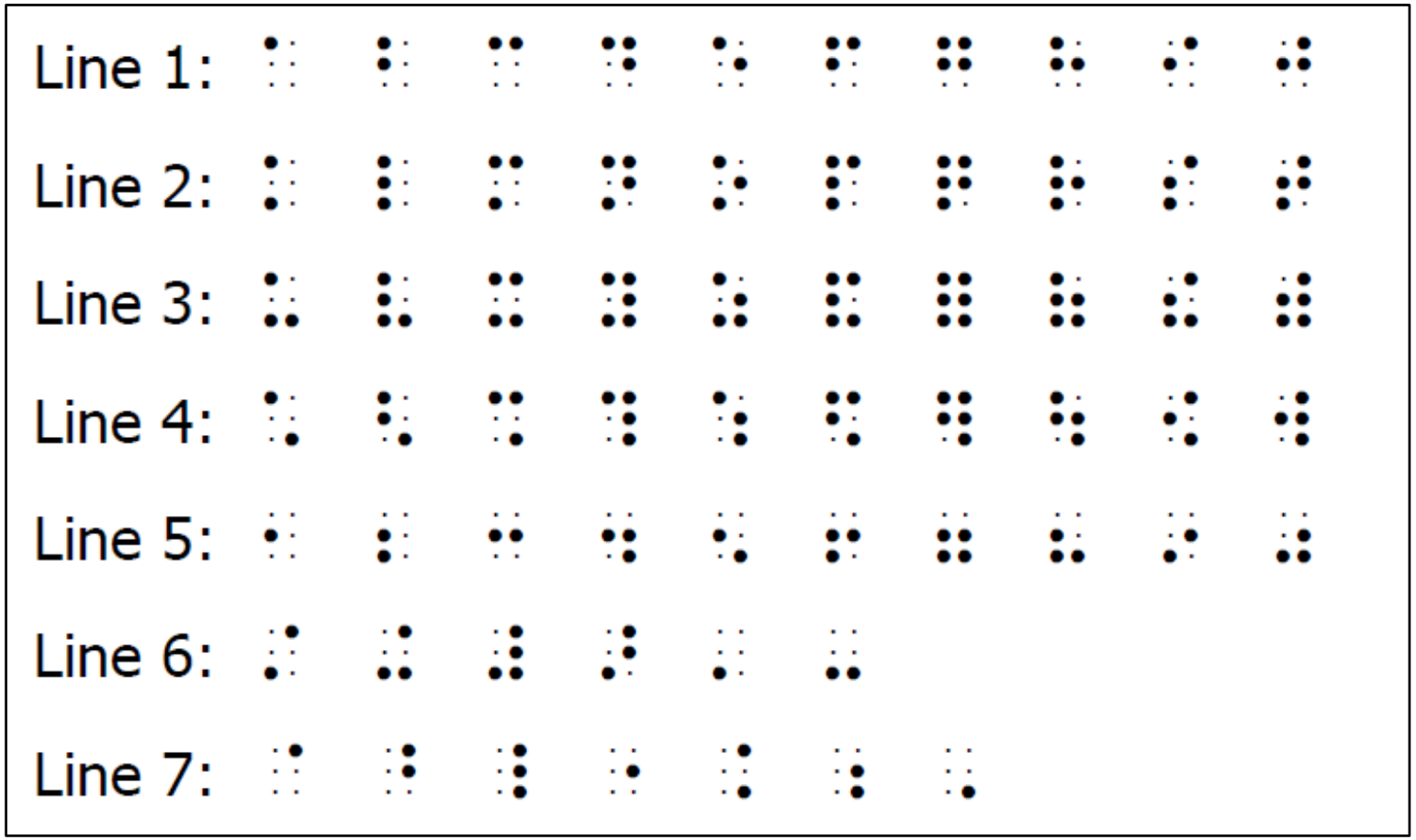


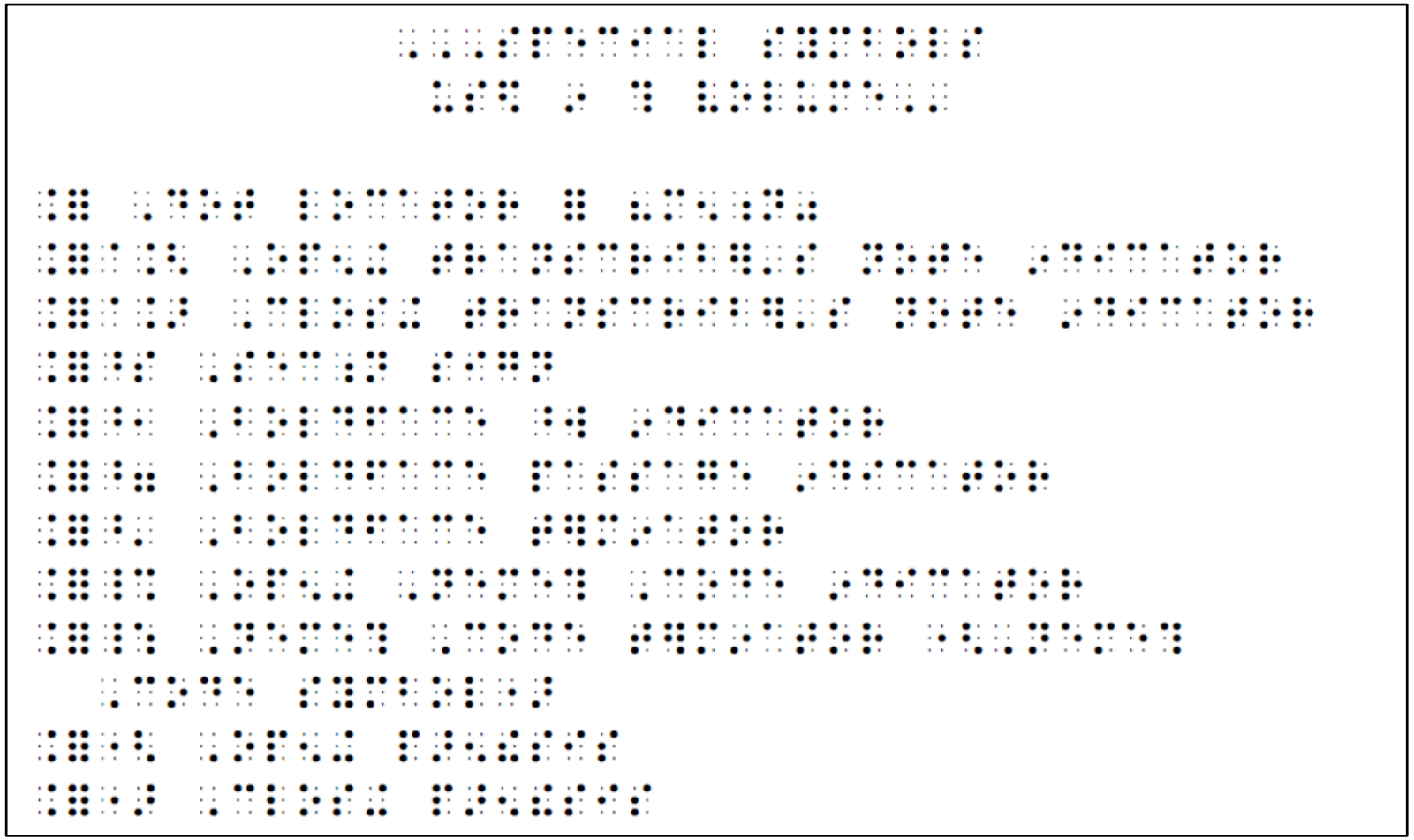
CODE SWITCH Symbols for UEB with Nemeth

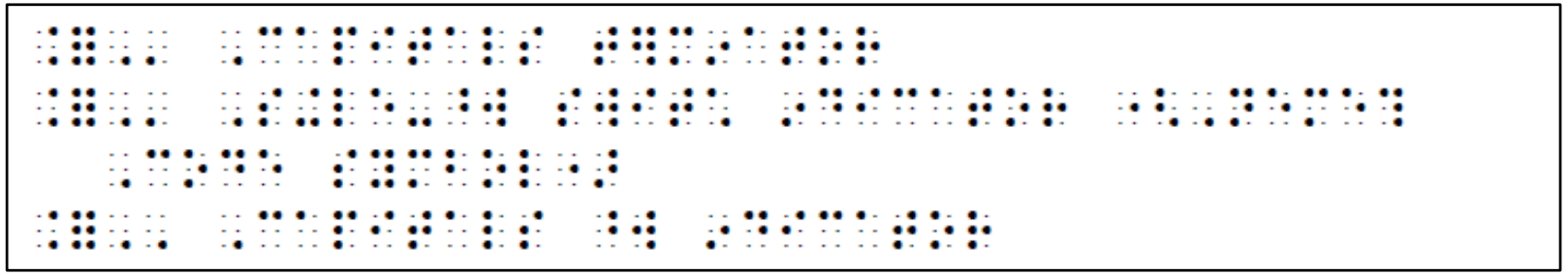
- ⠸⠸
  opening Nemeth Code indicator
- ⠸⠸
  Nemeth Code terminator (Nemeth Code symbol)
- ⠸⠸
  single-word switch indicator (Nemeth Code symbol)

Braille Order of Code Switch Symbols

- ❑ ⠸⠩
- ❑ ⠸⠱
- ❑ ⠨⠌







Very Basic Nemeth Code Symbols

-

  digits
-

  simple fraction indicators, open and close
-

  decimal point
-

  plus

More Resources for UEB with Nemeth

- Quizlet flashcards from BrailleTrainer
- Pearson's Nemeth Symbol Library
- …
  - cheat sheets, online courses, organizational trainings, …

Common Issues in Nemeth Code Transcriptions

- upper-cell numbers instead of lower-cell

  ⠼⠁⠃⠂⠑ vs. ⠼⠁⠃⠲⠑ for “twelve point five”

- missing baseline indicators where needed

  ⠼⠭⠘⠍⠬ vs. ⠼⠭⠘⠍⠐⠬ for “x-squared plus five”

- others?

WHAT IS NEXT FOR THE NEMETH CODE?

Quote from Nemeth Code Book

"Although the Code is intended to be as complete as possible, **finality can never be achieved by any code.** In the course of the rapid development in the fields of science and technology, new signs are constantly being devised and old ones modified. …"

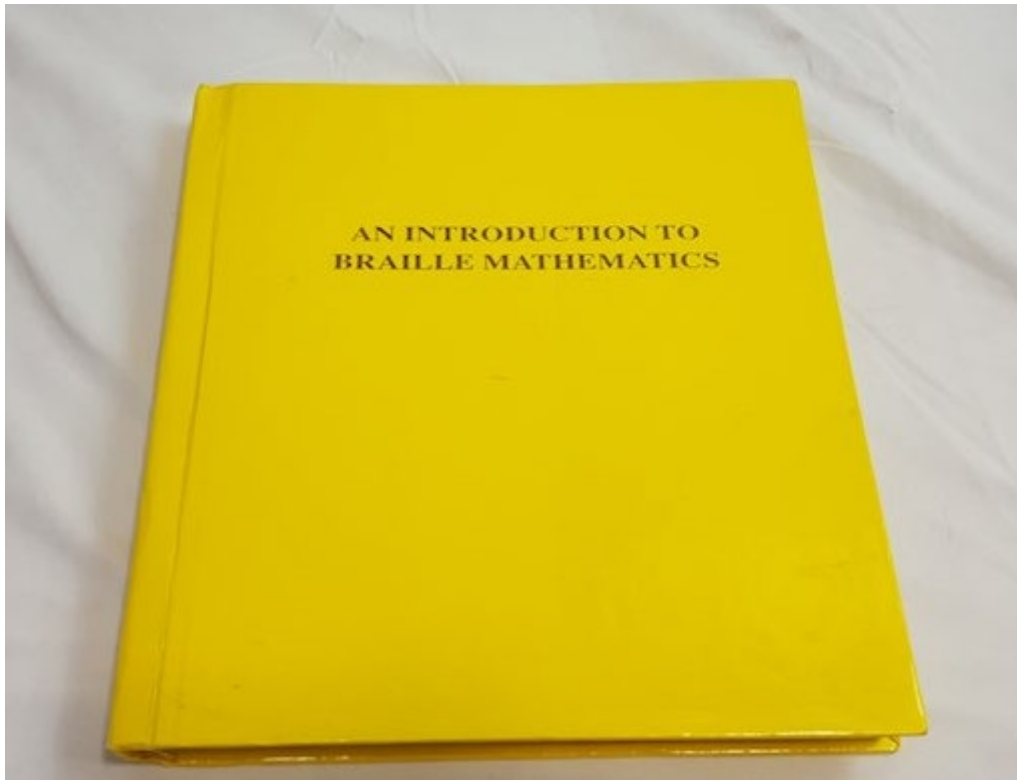
–Nemeth Code §1.c (emphasis added)

Current Status of the Nemeth Code, *interview with Dorothy Worthington*

- ❖ Dorothy Worthington is Chair of BANA's Nemeth Code Technical Committee
- BANA committee is making major revision of Nemeth Code
- Goal is updated code content approved this year (2021)
- Code will be accessible (available in PDF and BRF)
- Updated code incorporates all components of the code
- Review and preparation for final publication will take time

Nemeth Code Course

As of today (02/12/2021), the NLS Mathematics Braille Transcribing Course and Certification are EBAE-based.



Provisional Revised Nemeth *within UEB* Course

"Due to the need to make this training manual available to transcribers as soon as possible, we are offering a provisional version of the lessons in downloadable electronic format before being completely field tested and while BANA is revising the Nemeth Code. Exercises at the end of each lesson will not be available until a path toward certification is established. …"

–"About" section of the Provisional Nemeth Code Course

Poll Question 2

Poll #2

What process(es) did you use to transcribe the "Jungle Book" math practice?

A. ASCII Math
B. Six-key entry
C. LaTex (e.g., via Overleaf, TeXmaker, etc.)
D. Scientific Notebook
E. MathType
F. Other

A Multitude of Ways to Transcribe

There is no magic transcription tool

We can only help you achieve a solid foundation in the appropriate braille code.

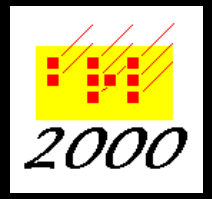
Then you can evaluate your output and adjust your personal input process.

BRAILLE TRANSCRIPTION SOFTWARE PROGRAMS

Jungle Books: UEB Math/Science & UEB with Nemeth

Most Common Programs in the U.S.

Braille2000



BrailleBlaster

Duxbury Braille Translator

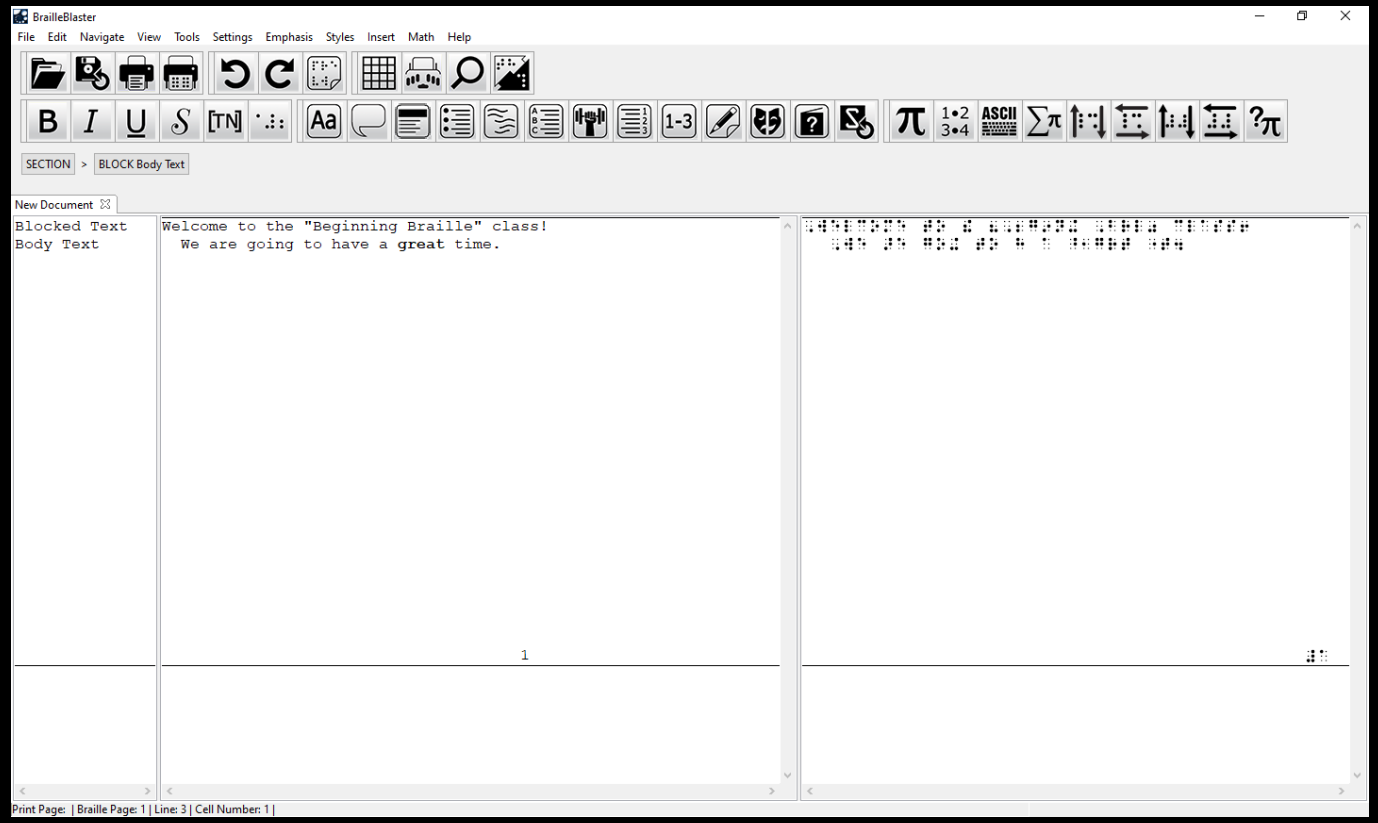
Braille2000

- also referred to as B2K
- has been criticized for its
  - lack of accessibility
    - but wait! There is a Talking Edition!
  - slow development
- beloved for its
  - SpeedBraille™ Keys
  - color-coding
  - hands-on editing feel

Jungle Books: UEB Math/Science & UEB with Nemeth

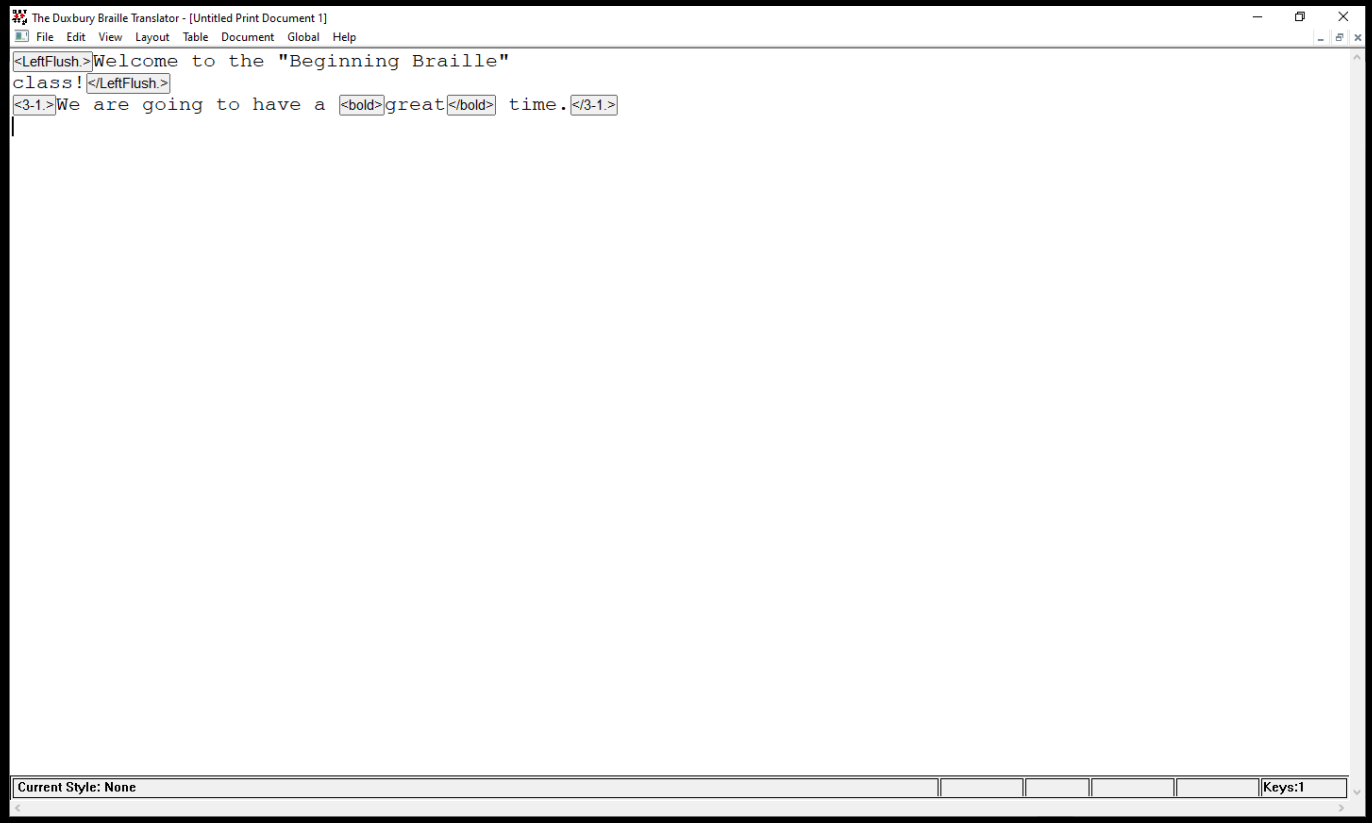
BrailleBlaster

- sometimes referred to as BB
- has been criticized for its
  - development bugs
  - separated editing tools
- beloved for its
  - side-by-side view
  - price (free)
  - parsing of NIMAS (.xml) files



Duxbury Braille Translator

- also referred to as Dux and DBT
- has been criticized for its
  - nonintuitive editing tools, including unconnected print & braille files
  - price
- beloved for its
  - breadth of translation tables
  - international presence
  - bridge to word processing software (e.g. Microsoft WORD)



Jungle Books: UEB Math/Science & UEB with Nemeth

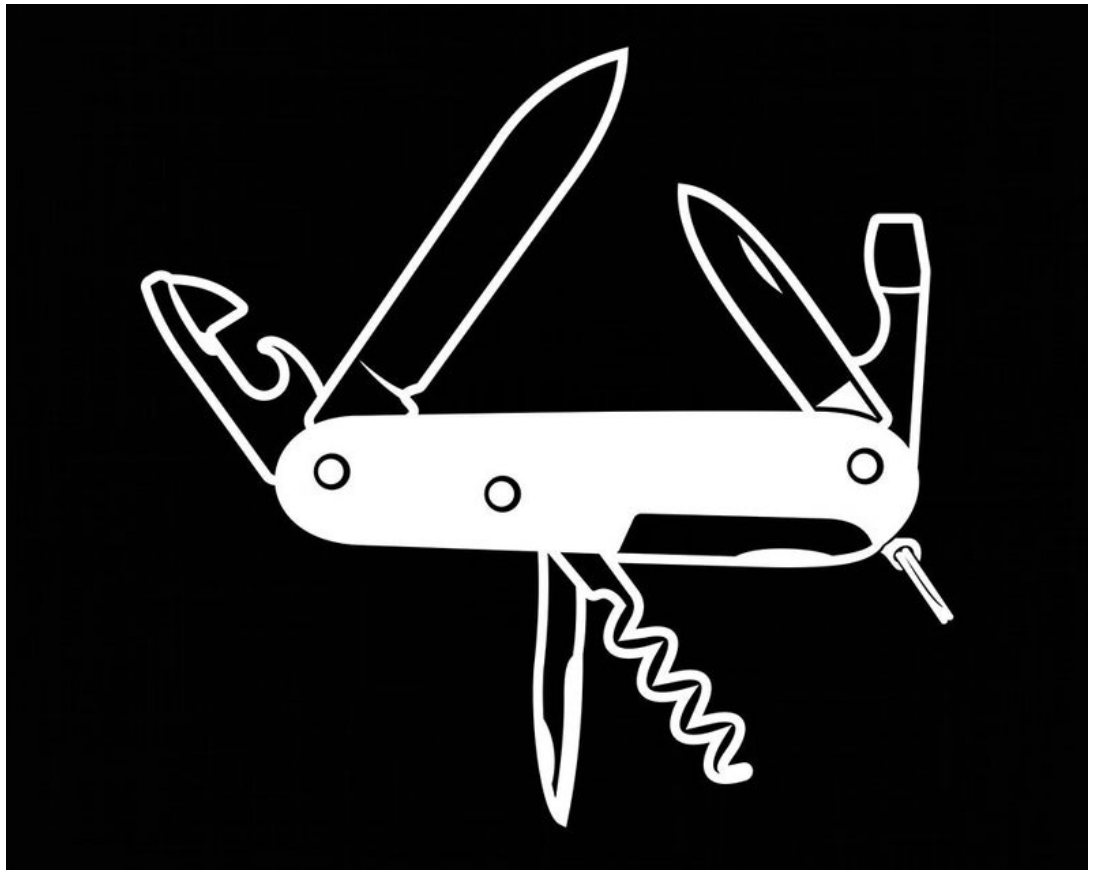
UEB MATH/SCIENCE

UEB Characteristics

according to Kyle

- Consistent
- “Back-translatable”
- Representative of print

UEB is all one code



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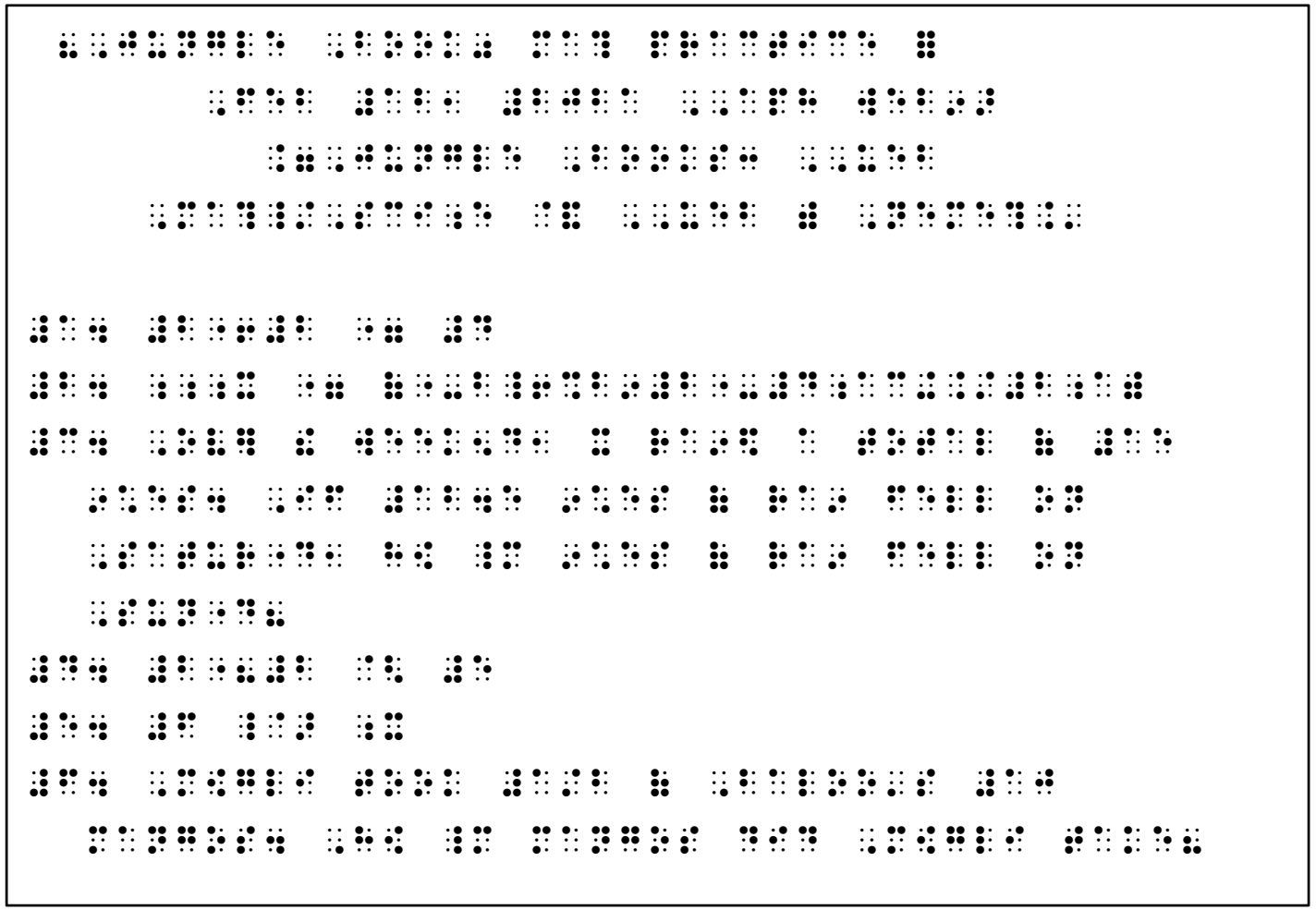
Jungle Books UEB Math/Science Key



Primary Sources for UEB Math/Science

- ICEB's UEB page: iceb.org/ueb.html
- Hard copy of *Rules of UEB Second Edition 2013*
  - with updates
- **and** Guidelines for Technical Material
  - with updates, including new Section 3

Very Basic UEB Math/Science Symbols

- ⠌
  numeric fraction line
- ⠌⠡
  “cross” multiplier ×
- ⠻ ⠜ ⠹⠹
  general fraction indicators, open and close, and general fraction line
- ⠌⠬
  plus

More Resources for UEB Math/Science

- Quizlet flashcards from BrailleTrainer
- UEBOnline's Math Modules
- …
  - cheat sheets, online courses, organizational trainings, …

Common Issues in UEB Math/Science Transcriptions

- not using grade 1 mode

  ⠷⠁⠨⠌⠃⠾ vs. ⠸⠸⠷⠁⠨⠌⠃⠾ for “a over b”

- missing text or “unidentified” print symbol
- others?

WHAT IS NEXT FOR UEB GUIDELINES FOR TECHNICAL MATERIAL (GTM)?

“Unified English Braille continues to expand its reach. …”

–Foreword to *Rules of UEB Second Edition*

Current Status of UEB GTM, *words from Kathy Riessen*

- ❖ Kathy Riessen is Chair of the ICEB Code Maintenance Committee
- 2014 GTM is ready for revision, including expansion
- Goal to create clear document with plenty of examples
- GTM is being updated section by section
- Updating includes time for testing and input and approval is multi-step
- We will never be finished updating the GTM; the world keeps changing

UEB Technical Course

As of today (02/12/2021), there is no NLS course in using UEB for math and science.

CNIB's UEB Technical is a self-directed course in UEB for technical material. It is not an instruction manual.

We will talk more about braille certifications on Friday, March 5, 2021, 1:00-2:00pm ET

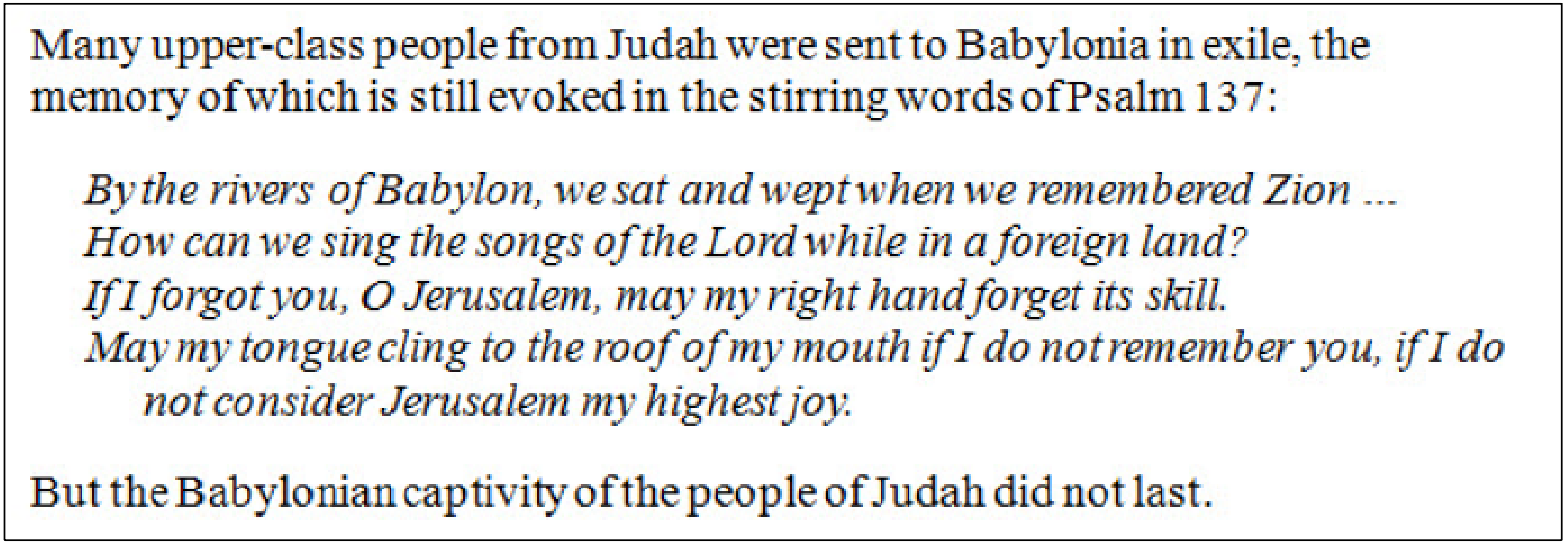
Terminology

On September 21, 2020, the Braille Authority of North America (BANA) adopted a document entitled “Terminology: **UEB Math/Science** and **UEB with Nemeth**.”

Poll Question 3

Poll #3

Which braille transcription shows the correct formatting of the pictured displayed verse?

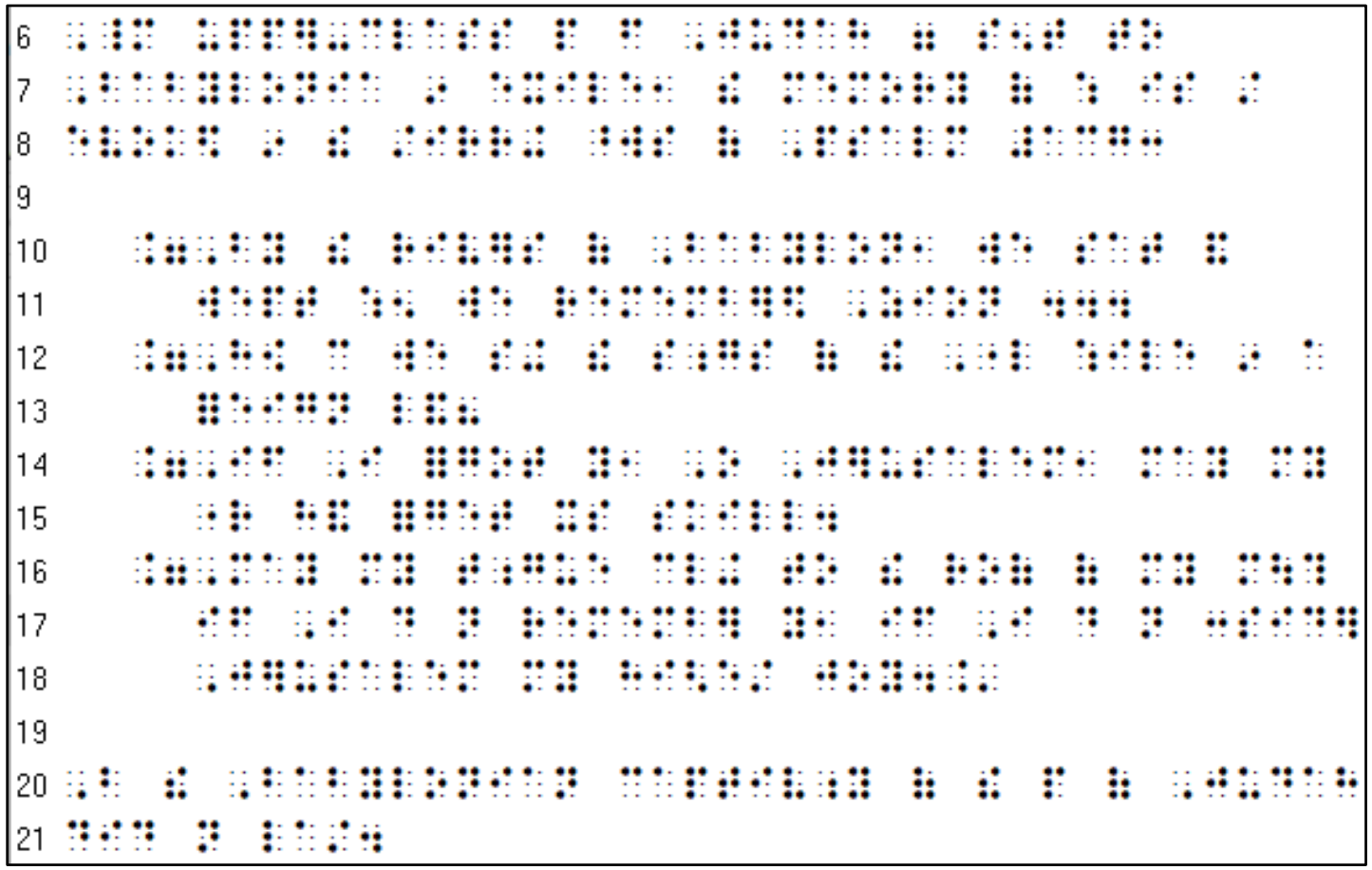


Many upper-class people from Judah were sent to Babylonia in exile, the memory of which is still evoked in the stirring words of Psalm 137:

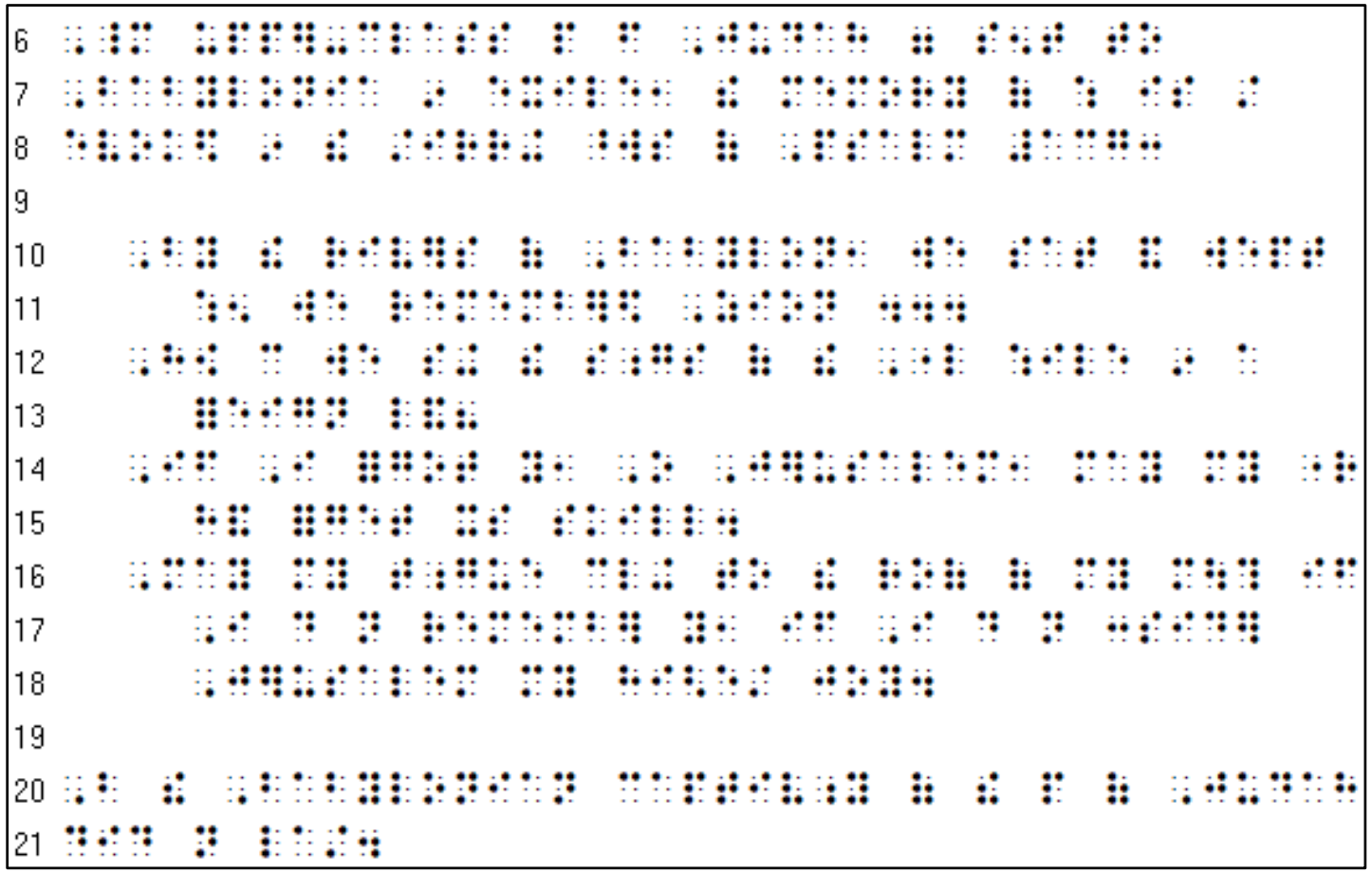
By the rivers of Babylon, we sat and wept when we remembered Zion …
How can we sing the songs of the Lord while in a foreign land?
If I forgot you, O Jerusalem, may my right hand forget its skill.
May my tongue cling to the roof of my mouth if I do not remember you, if I do not consider Jerusalem my highest joy.

But the Babylonian captivity of the people of Judah did not last.

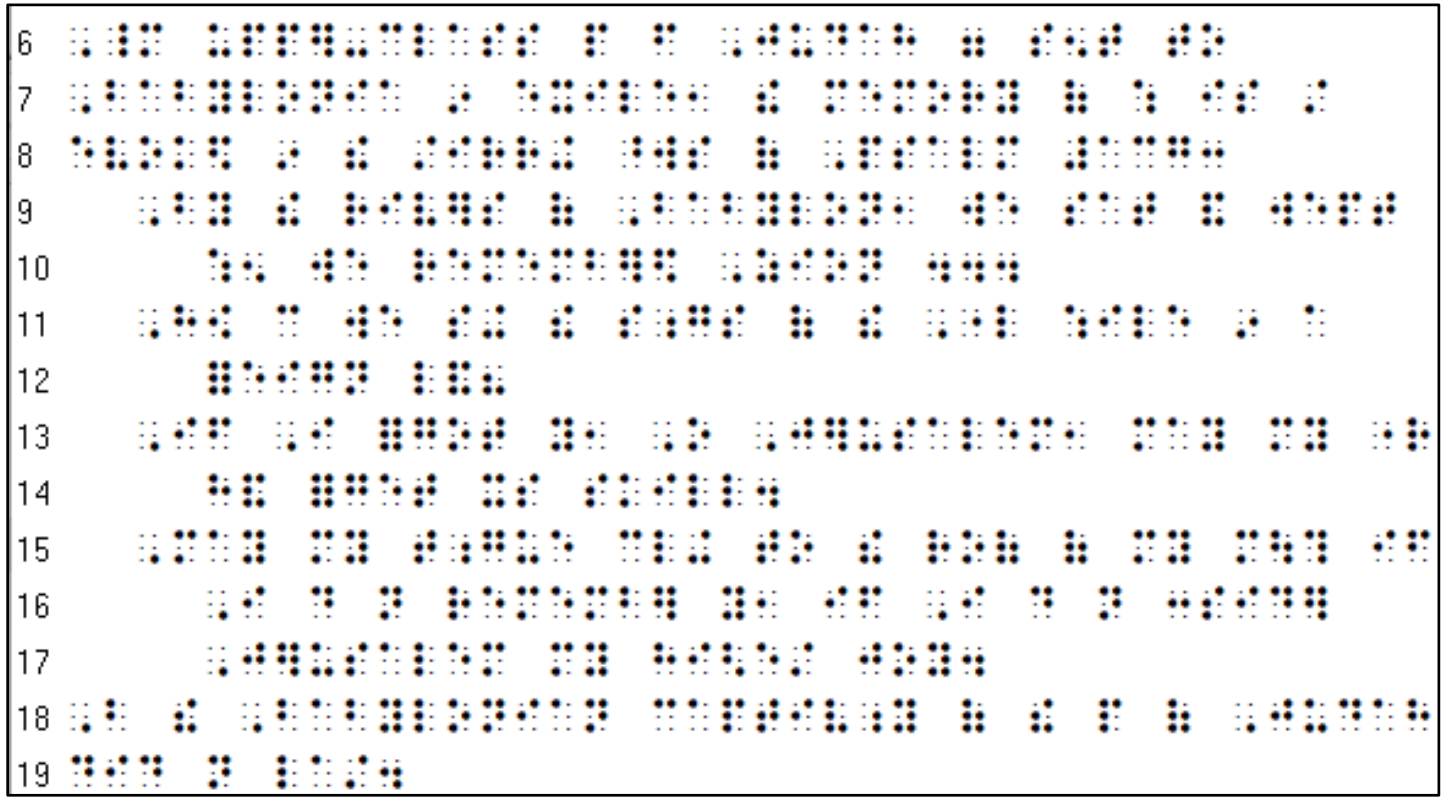
A. skipped lines with typeform retained



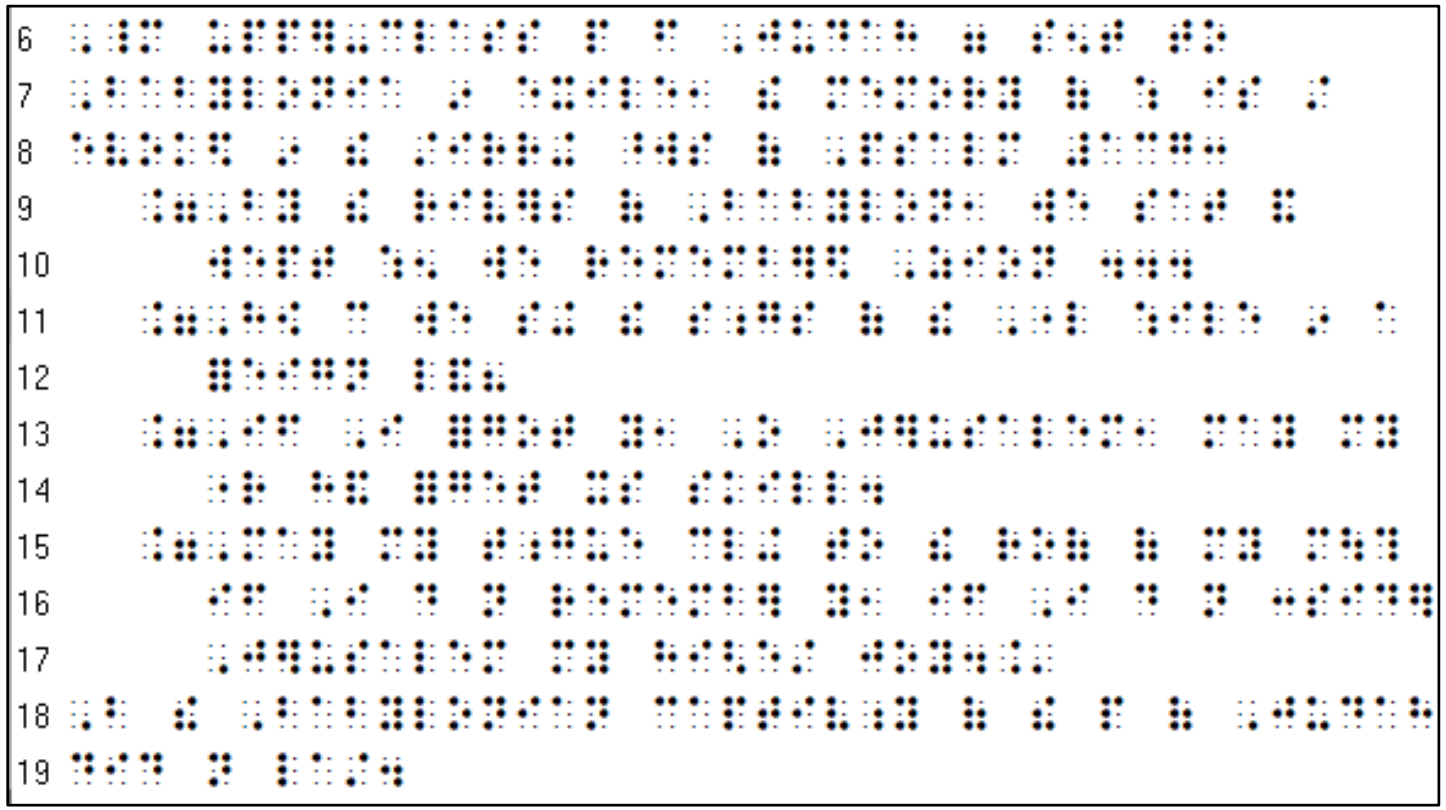
B. skipped lines with typeform ignored



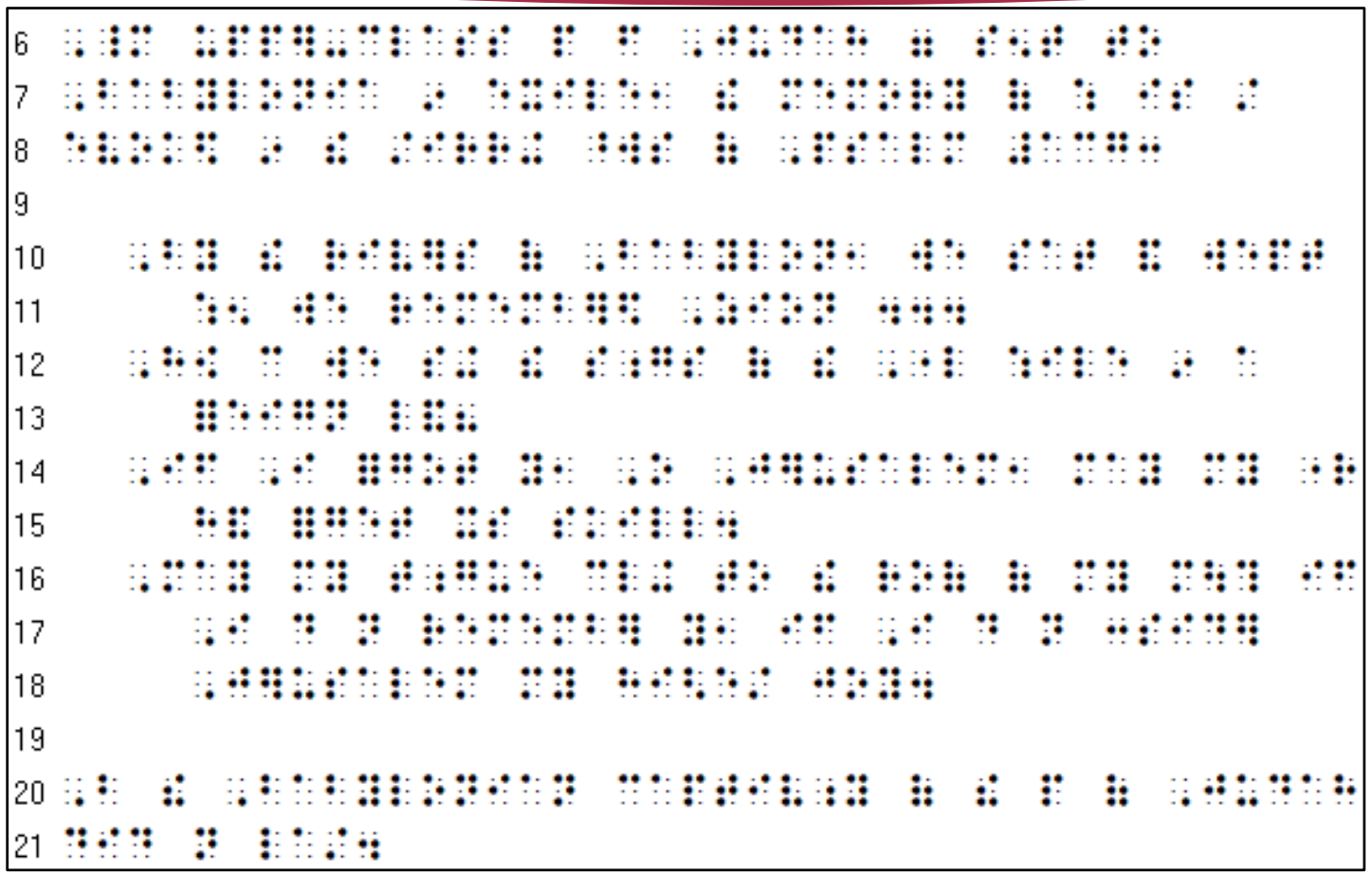
C. no skipped lines with typeform ignored



D. no skipped lines with typeform retained



B. skipped lines with typeform ignored

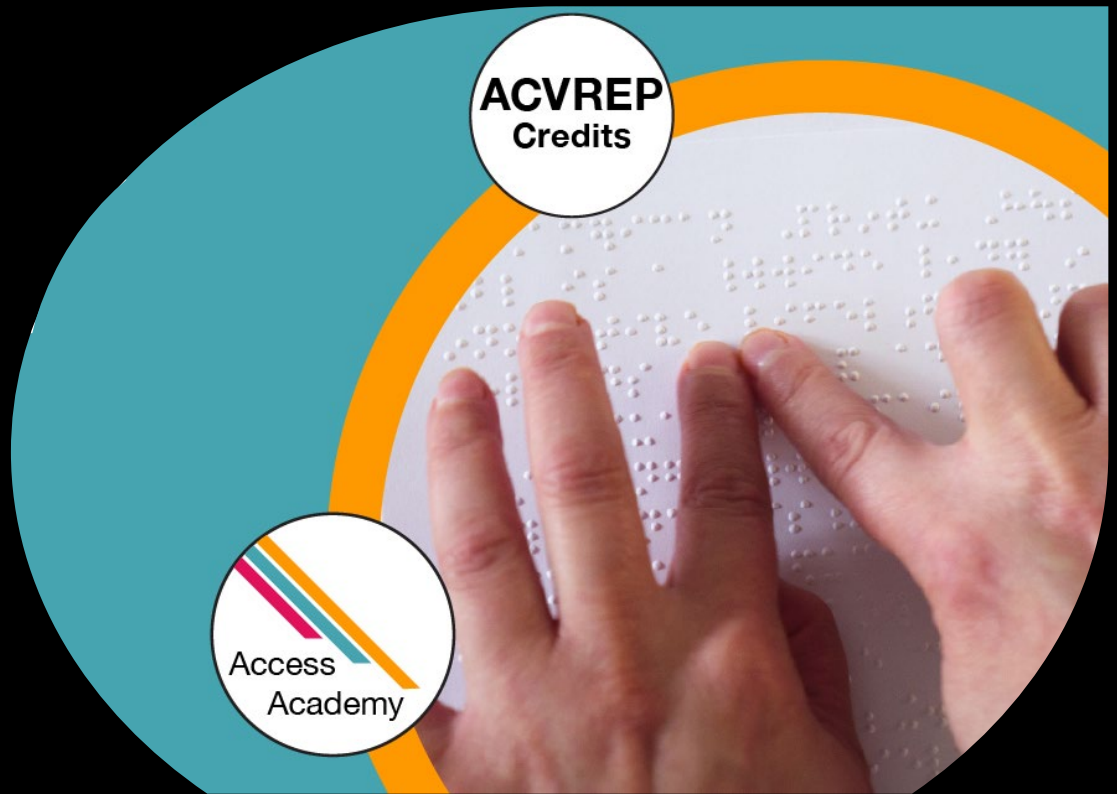


UPCOMING WEBINAR

Join us next time for

Does Braille Formatting Spark Joy?

Friday, Feb 19,
1:00-2:00 ET

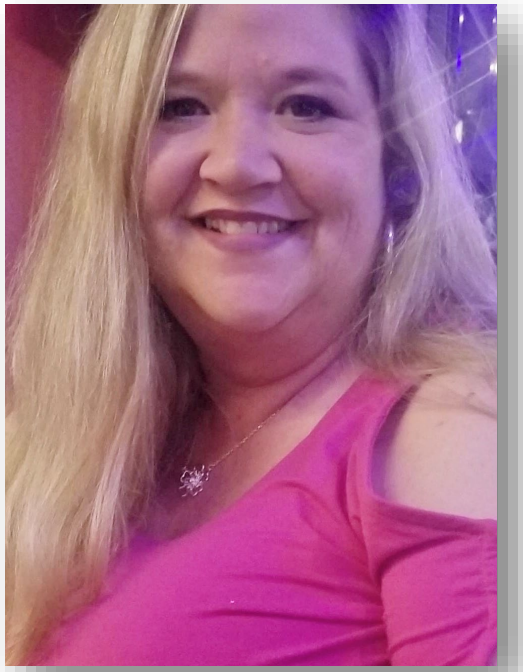


AMERICAN PRINTING HOUSE FOR THE BLIND

Our Presenters

kdejute@aph.org

Kyle DeJute, Braille Trainer



deadens@aph.org

Dawn Eadens, Digital Textbook File Developer