

Section 19

Codes and Puzzles

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19.1 Fundamentals

- 19.1.1 There are many types of codes and puzzles and it is impossible to discuss all of them. This section provides the foundation of transcribing puzzles and simple codes, and serves as a guideline to formatting more complex situations.
- 19.1.2 A puzzle should be transcribed on a single page whenever possible. Place a long puzzle on facing interpoint pages when it will not fit on a single page. When single-sided embossers are used, an agency may choose to bind two-page puzzles so they face each other.

19.2 Number, Letter, and Other Puzzle Codes

- 19.2.1 When letters, numbers, or pictures are substituted for other letters, numbers, and/or pictures:
- Follow print when there are braille equivalents.
 - When there are no braille symbols equivalent to the print symbols, use braille symbols devised by the transcriber.
 - Substitute words or letters for pictures. Insert a transcriber's note explaining this usage. Sample:

All picture clues in the puzzle have been changed to word clues.
 - List symbols on the Special Symbols page or in a transcriber's note before the text.
- 19.2.2 **Linear Key Format.** When letters are printed above or below the line(s) of code characters:

- a. To ensure the code will be read as individual letters, insert the grade 1 passage indicator, beginning in cell 1 and preceded by a blank line or an opening box line, before the beginning of the puzzle or code. The dot locator for "use" is required before the grade 1 passage indicator. (See *UEB*, §3.14, Dot locator for "use.") If the puzzle or code is in capital letters, include the capitals passage indicator following the grade 1 passage indicator (unspaced).
- b. Use the next two consecutive braille lines (margins 1-1) for the code characters.
- c. When the code characters are longer than one braille line, precede and follow each set of code characters by a blank line.
- d. Place each braille letter directly above or below its corresponding code character.
- e. When a single letter appears above or below a two-digit number, place the letter above or below the first digit of the number.
- f. Explain the puzzle format in a transcriber's note. Sample:

The puzzle code symbols are under the letters.
- g. Place a grade 1 terminator, beginning in cell 1 and preceded by the dot locator for "use," on the line following the last line of the puzzle. If the capitals passage indicator was used, insert the capitals terminator before the grade 1 terminator (all unspaced).
- h. Follow the puzzle with a blank line or a closing box line.

(See [Sample 19-1: Symbol Code](#) on page 19-10 and [Sample 19-2: Linear Key Format](#) on page 19-12.)

19.3 Words in Code

19.3.1 Coded Word Puzzles

- a. When numbers are substituted for letters, connect the numbers that represent each word with hyphens.
- b. Leave one blank cell between words.
- c. Do not divide words between braille lines.

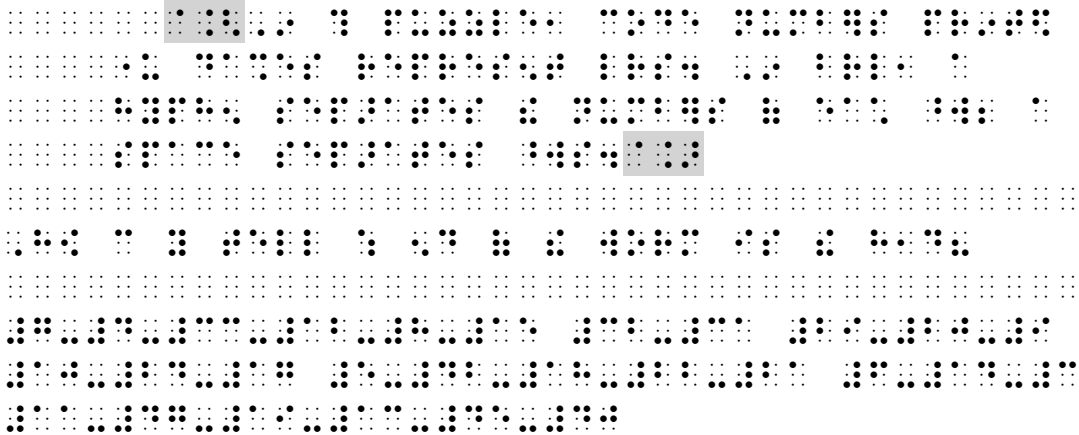
- d. Insert a transcriber's note explaining the puzzle format.
Sample:

A hyphen separates the numbers of each word; a space separates words.

Example 19-1: Number-Coded Words

How can you tell which end of the worm is the head?

7	4	33	12	8	15	32	31			
29	20	9	10	24	17	5	42	18	22	21
6	14	3	11	47	19	13	45	40		



- e. Use uncontracted braille when coded puzzles are scrambled letters.
- f. Grade 1 indicators may be required before single letters in the puzzle or key. (See [Sample 19-3: Coded Letter Puzzle](#) on page 19-13.)
- g. Substitute an underscore for a blank space within a word. (See [Sample 19-4: Coded Number Riddle](#) on page 19-14.)

19.4 Morse Code

19.4.1 Morse code may be shown by a series of dots and dashes.

- ⠠ Morse code dot
- ⠠ Morse code dash

- ### Example 19-2: Morse Code (Letters Added for Readability)

19.4.2 Follow print when sounds such as dit, di, and dah represent the Morse code sounds.

- Use a hyphen to connect the sounds of a single letter.
- Use a space to separate the letters within words.
- Follow print for punctuation.
- Line breaks are between words. Do not divide words between braille lines.

dah-dah dah-dah-dah di-dah-dit di-di-dit dit, dah-di-dah-dit dah-dah-dah
dah-di-dit dit.

19.5.1 The format for crossword puzzles is explained before the puzzle if there is only one puzzle in the volume. The format is provided on the Transcriber's Notes page if there is more than one puzzle in the volume. When the note is on the Transcriber's Notes page, insert a transcriber's note before the puzzle to indicate the location of the explanation. Sample:

Section 19
Codes and Puzzles

19.5.2

Puzzle Clues

- a. Place the clues before the puzzle grid.
- b. Format "Across" and "Down" as cell-5 headings.
- c. Use 1-3 margins for the list of clues.
- d. Present lists of answer words in uncontracted braille.
- e. Give transcriber-assigned column letters and row numbers on the same line, after the clue.
- f. The number of letters in the puzzle word may be enclosed in parentheses, at the end of each clue.
- g. Enclose the transcriber-assigned column letters/row numbers, and the number of letters in the word, in an embedded transcriber's note.

Example 19-4: Embedded Transcriber's Note

1. Parent's female child



19.5.3

Puzzle Grid.

A puzzle grid is the pattern of empty and filled cells.

- a. Puzzles shaped to resemble a flower, animal, etc., are squared off and the shape is described in a transcriber's note.
- b. Assign column letters (**a-z**) across the top of the puzzle grid (omit the grade 1 indicator) and number each row in the puzzle grid.
- c. Represent each square to be filled in by a hyphen.
- d. Represent each black square or blank space by a full cell.
- e. When the puzzle is larger than 26 squares across, the second set of column letters is doubled, i.e., **aa, bb, cc**. These doubled letters require a two-cell column.
- f. Transcribe letters included in the puzzle in their proper spaces without capitals or the grade 1 indicator.
- g. Use the same number of spaces as there are squares in the puzzle; do not insert extra spaces.
- h. When possible, place the grid on one page.
- i. When the grid is too long for a page, repeat the column letters on line 1 on the next page (line 2 if a running

head is used). The grid must allow space for the page number and the three blank cells preceding it. When it will not fit on the line with the page number, begin the grid on line 2.

- j. When the grid is too wide for one page, place the grid on facing pages or continued pages. Explain the format in a transcriber's note. Sample:

The puzzle grid is too wide to fit on a single page. The grid appears across facing pages.

- k. When the puzzle will not fit on a single braille page, place the grid and as many of the clues as possible on interpoint facing pages.
- l. Insert a transcriber's note before the crossword puzzle. Sample:

In the following crossword puzzle, each clue is followed by a transcriber-assigned column letter and row number. Numbers in parentheses at the end of each clue indicate the number of letters in the puzzle word. The clue letter/number and number of letters in the word are enclosed in transcriber's note indicators. In the grid, a hyphen represents a square to be filled in, and a full cell represents an empty space.

(See [Sample 19-5: Crossword Puzzle](#) on page 19-18.)

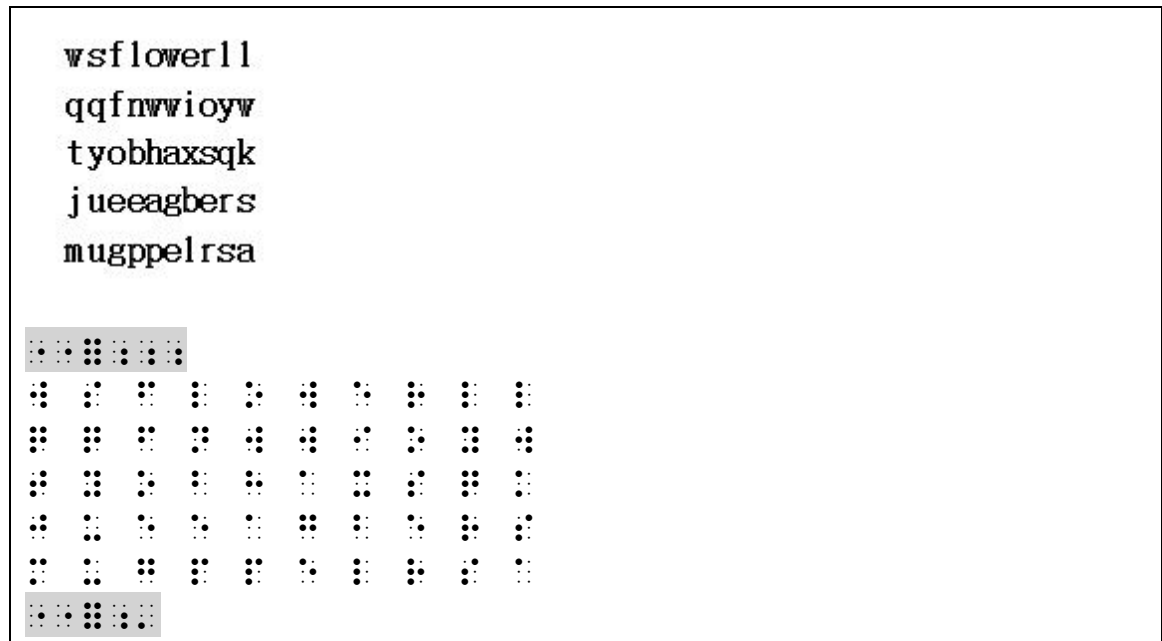
19.6 Word Puzzles and Letter Searches

19.6.1 Although it is not possible to provide specific formats for all such materials, observe these general directives.

- a. Use uncontracted braille for word puzzles and word searches.
- b. Insert the grade 1 passage indicator preceded by a blank line before the beginning of the puzzle to ensure it is read as individual letters. The dot locator for "use" is required before the grade 1 passage indicator, which might otherwise be misread because the symbols-sequence would contain no upper dot. Place the grade 1 terminator on the line following the puzzle (which also requires the dot locator for "use"). Insert a blank line to indicate the end of the puzzle. (See *UEB*, §3.14, Dot locator for "use.")

- c. Insert a space between each letter. If a word puzzle or letter search will not fit on the braille page in this format, the space between letters may be omitted.
- d. Do not leave blank lines between lines of the puzzle.

Example 19-5: Word Puzzle



- e. When a puzzle or letter grid requires more than one braille page, insert “(cont.)” in an embedded transcriber’s note on the last line of each page of the puzzle (except the final page). Start the note in cell 1.
- f. For irregularly shaped puzzles, do not insert spaces between letters; follow print for letter placement.

(See [Sample 19-6: Shaped-Letter Puzzles](#) on page 19-20.)

19.7 Sudoku

19.7.1 A normal 9×9 print Sudoku puzzle uses 30 cells across and 11 lines down in braille.

- a. Use line mode for the horizontal and vertical lines forming the puzzle. (See *UEB*, §16, Line Mode, Guide Dots.)
- b. Do not enclose the puzzle in boxing lines.
- c. Separate each square by a space.
- d. Indicate each empty square by an underscore.

(See [Sample 19-7: Sudoku](#) on page 19-22.)

19.8 Samples

[Sample 19-1: Symbol Code](#), page 19-10

[Sample 19-2: Linear Key Format](#), page 19-12

[Sample 19-3: Coded Letter Puzzle](#), page 19-13

[Sample 19-4: Coded Number Riddle](#), page 19-14

[Sample 19-5: Crossword Puzzle](#), page 19-18

[Sample 19-6: Shaped Letter Puzzles](#), page 19-20

[Sample 19-7: Sudoku](#), page 19-22

Sample 19-1: Symbol Code

SYMBOLICALLY SPEAKING

These days, weather is predicted using computers and radar, but did you know that you can predict the weather just by looking at a pine cone? To find out how, use the letters and symbols chart to decode the sentence that follows.

A	C	D	E	F	G	H	I	L
☾	☆	☆	🚀	☪	■	✧	★	⬆
N	O	P	R	S	T	U	W	Y
☁	☾	👁	⬇	●	☀	☪	◊	🕒

◊ ✧ 🚀 ☁ ★ ☀ ★ ● ■ ☾ ★ ☁ ■ ☀ ☾

⬇ ☾ ★ ☁ , ☀ ✧ 🚀 ● ☆ ☾ ⬆ 🚀 ● ☾ ☪ ☾

👁 ★ ☁ 🚀 ☆ ☾ ☁ 🚀 ☆ ⬆ ☾ ● 🚀 ☪ 👁 ;

★ ☁ ★ ⬇ 🕒 ◊ 🚀 ☾ ☀ ✧ 🚀 ⬇ ,

☀ ✧ 🚀 🕒 ☾ 👁 🚀 ☁ .




















Sample 19-2: Linear Key Format

Assign a symbol or number for each letter of the alphabet. Share the code with anyone who will read or return a response to your written message.

Here is a secret code you can use.

A	B	C	D	E	F	G	H	I	J	K	L	M
2	4	6	8	1	3	5	7	9				

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
												

1                   

Sample 19-3: Coded Letter Puzzle

Decode the words from your spelling list using the secret code. Write your answer in the space provided.

CODE	q	w	e	r	t	y	u	i	o	p	a	s	d	f	g	h	j	k	l	z	x	c	v	b	n	m
LETTER	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z

1. stdgf _____
2. kqwwoz _____
3. ixfuln _____
4. ygktlz _____
5. usqll _____

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.

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Sample 19-4: Coded Number Riddle

PICTURE RIDDLE

Solve the following riddle with the help of the pictures under it. First, write the name of each item on the spaces below it. Then, move the letter on each numbered blank to the blank with the same number at the bottom of the page. Do this correctly and the riddle answer will be revealed. Get the picture?

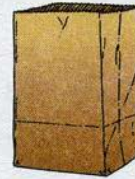
WHY DO GOLFERS CARRY AN EXTRA PAIR OF SOCKS?



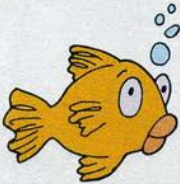
— 23 10



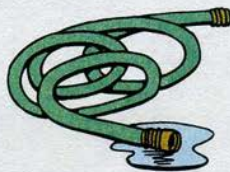
3 14 — 18



— 4 11



— 19 5 15



8 21 — 6



20 — 1 17



— — 16 — 2




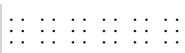
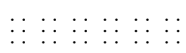
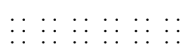
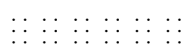
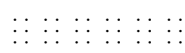



7 — 12 9



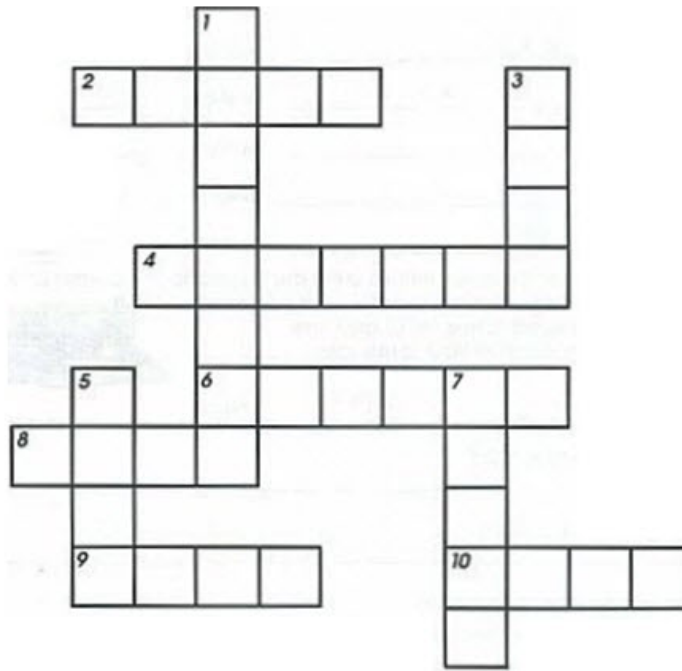
13 — 22 —

Riddle Answer:

1 2 3 4 5 6 7 8 9 10 11 12 13 14
15 16 17 18 19 20 21 22 23 !

1         

Sample 19-5: Crossword Puzzle
























































































































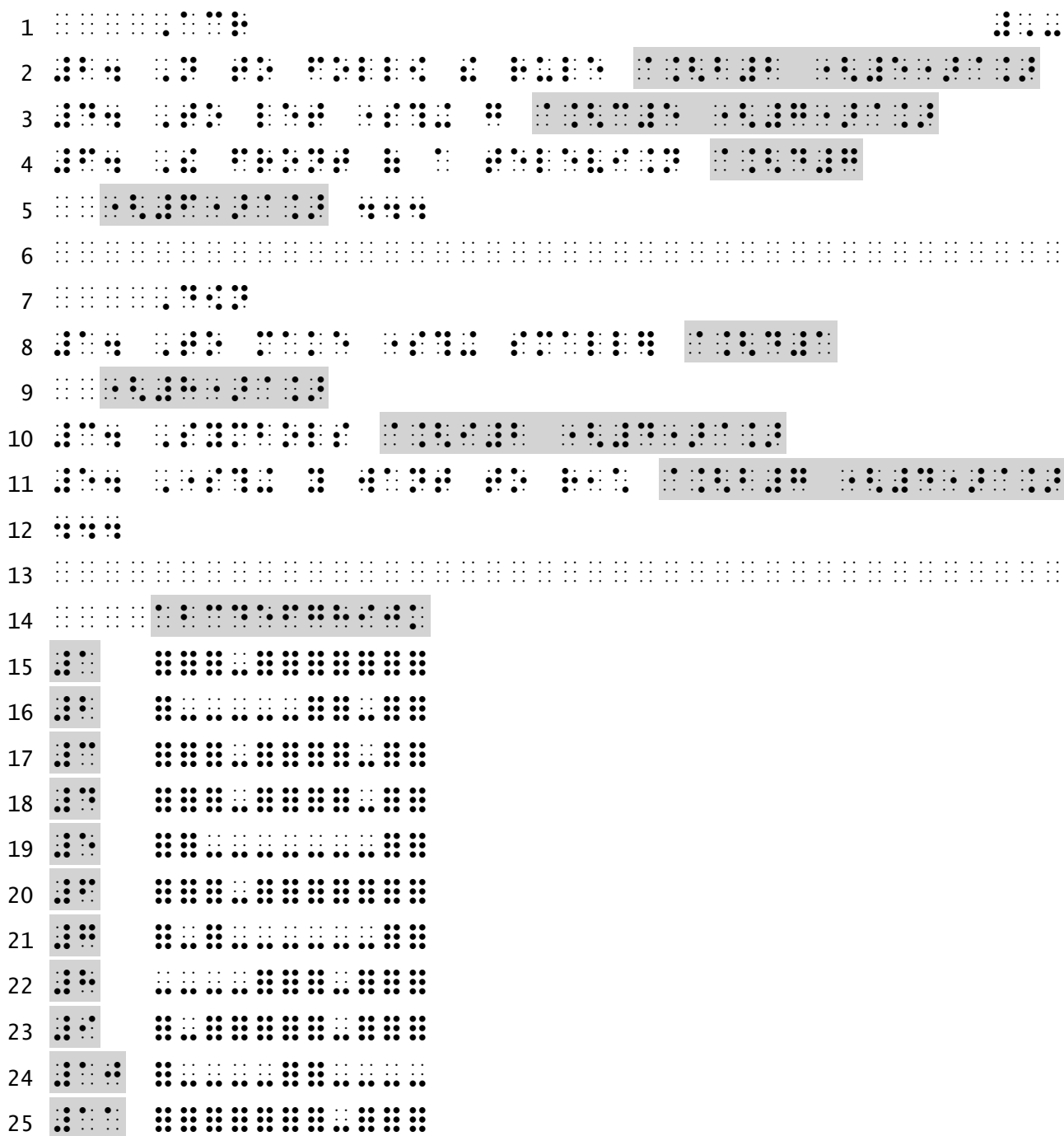
Across

2. Not to follow the rule
4. To let something go
6. The front of a television
8. To take part in an election
9. To lend someone something
10. To beg

Down

1. To make something smaller
3. Symbols
5. Something you want to reach
7. To select someone for a certain position

10														
11														
12														
13														
14														
15														
16														
17														
18														



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Sample 19-6: Shaped Letter Puzzles



Figure 1 displays a 20x20 grid of dot patterns, where each dot represents a bit in a 20-bit binary sequence. The grid is organized into four 10x10 quadrants. The top-left quadrant (rows 1-10, columns 1-10) shows a sparse pattern of dots. The top-right quadrant (rows 1-10, columns 11-20) shows a sparse pattern of dots. The bottom-left quadrant (rows 11-20, columns 1-10) shows a sparse pattern of dots. The bottom-right quadrant (rows 11-20, columns 11-20) shows a sparse pattern of dots. The grid is labeled with numbers 1 to 20 on the left side, corresponding to the rows.

Sample 19-7: Sudoku

1						8		
	5			8			9	
		4		6			2	5
			7			3	8	9
		8				5		
3	6	1			8			
6	9			2		7		
	8			3			5	
		5						4

5											
6											
7											
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10											
11											
12											
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15											

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