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New section  
Nemeth code

### **§196. (10-07) Stem-and-Leaf Plots:**

A stem-and-leaf plot is a method of showing data distribution. It is a specialized table that is brailled in Nemeth notation using the rules for Tables and Columns in *Braille Formats: Principles of Print to Braille Transcription*.

A stem-and-leaf plot is made up of columns and rows which usually include a heading. The data may be shown as numbers or letters. A key is almost always provided and must be brailled beginning in cell 1 preceding the stem-and-leaf plot.

The symbols used in a stem-and-leaf plot do not need to be included on a Special Symbols page unless the text is an elementary math book below the 4th grade.

**a.** The stem-and-leaf plot resembles a horizontal bar graph, and therefore, it is important to retain the shape. A vertical line (dots 456) separates the column headings and extends to the end of the plot. One blank cell precedes and follows the vertical line. The data on the left (stem) is right justified to the vertical line and the data on the right (leaf) is left justified to the vertical line.

**i.** Avoid running over lines if possible. If necessary to run over the line, indent the line two cells to the right. Exception: in back-to-back plots that have a runover in the left column, the indentation is two cells to the left.

**ii.** A runover of leaves shown in print should be ignored. Use the full width of the braille column before beginning an indented row.

**iii.** The next stem-and-leaf row entry begins on the line after the runover.

**iv.** Note: Do not follow the *Braille Formats* rules for blank spaces that occur across the width of a column in tables. A blank space in a stem-and-leaf plot column is left blank and may occur in either the stem or leaf.

**v.** Every effort should be made to be consistent throughout a transcription.

**b.** If a key is provided in print, it must precede the stem-and-leaf plot, even though it may appear in a different location in print. The portion of the key that replicates an entry in the plot is brailled without the numeric indicator or English letter indicator and including vertical lines as it would appear within the plot. The value assigned to the key is brailled using the numeric indicator or English letter indicator as required by the Nemeth Code. The key is formatted in cell 1 with any runover in cell 3.

When two keys are shown in print for back-to-back plots, the left column key is brailled first, followed by the right column key. Each is brailled beginning in cell 1 with any runover in cell 3.

**c.** When the data is represented by numbers in the body of the plot:

- i.** omit the numeric indicator in the body of the plot,
- ii.** braille single digit entries unspaced,
- iii.** entries consisting of groups of two or more digits require one blank cell between entries, (*See example 26D.*)
- iv.** omit a comma or other punctuation shown between units of data.

**d.** When the data is represented by letters in the body of the plot:

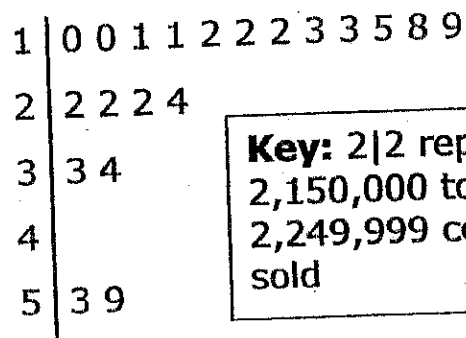
- i.** single cap each capital letter,
- ii.** omit the English letter indicator in the body of the plot,
- iii.** single letters are brailled unspaced,
- iv.** entries consisting of groups of two or more letters require one blank cell between each entry,
- v.** omit a comma or other punctuation shown between units of data.



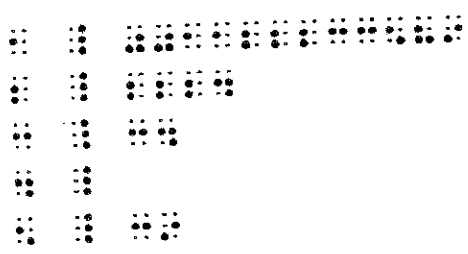
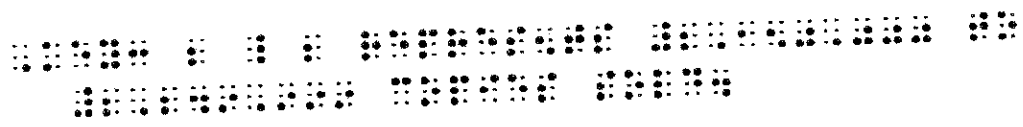
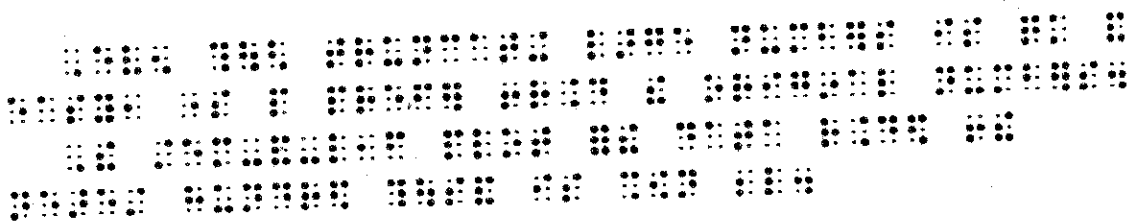
(2) This example is also a basic stem-and-leaf plot but without designated column headings. It also has a blank space in the leaf column next to stem #4.

Even though truncating large numbers is quick and easy, some people prefer to round the original numbers.

The stem-and-leaf plot for the data rounded to the nearest hundred thousand is shown below.



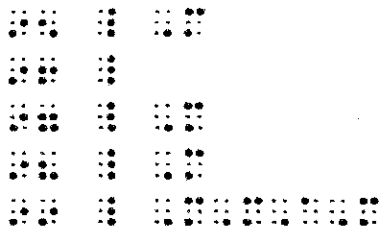
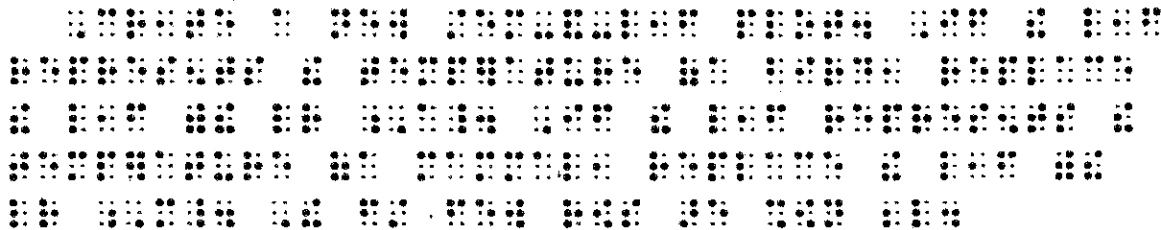
**Key:** 2|2 represents 2,150,000 to 2,249,999 copies sold



**(3)** This example is another undesignated plot with letters instead of numbers in the leaf column. No spaces are needed between letters, whether capitalized or not.

Create a new stem-and-leaf plot. If the leaf represents the temperature of a bird, replace the leaf with the letter A. If the leaf represents the temperature of a mammal, replace the leaf with the letter M. The first few rows are shown below.

95	M
96	
97	M
98	M
99	M M A M





(5) This example is called a back-to-back stem-and-leaf plot and is used when two sets of data are to be compared. Notice that there are two keys in these types of plots. Always put the left column key first followed by the right column key, both at the margin preceding the plot. Runovers to the left column are two cells to the left; runovers to the right column are two cells to the right.

### Mr. Abel's Test Scores

Second Grade Classes		Fifth Grade Classes	
0   5   represents a score of 50	4220	5   2469	5   2 represents a score of 52
	453150	6   24790	
	987776655521	7   111223334556667899900	
	999998888776655444332110	8   122244455789	
	98877753320	9   223577780	
		10   00	

