



Teaching and Learning of the Nemeth Braille Code

- Signs and Symbols of Comparison
- Miscellaneous Signs and Symbols

Signs and Symbols of Comparison

Space Before and After

- Equal to $=$ ⠠⠨⠠
- Less than $<$ ⠠⠨⠠
- Less than or equal to \leq ⠠⠨⠠⠨⠠
- Less than or equal to \leq ⠠⠨⠠⠨⠠⠨⠠
- Greater than $>$ ⠠⠨⠠
- Greater than or equal to \geq ⠠⠨⠠⠨⠠
- Greater than or equal to \geq ⠠⠨⠠⠨⠠⠨⠠

Examples

- $ab \geq cd$

- ⠠a ⠠b ⠠ge ⠠c ⠠d

- If $a < 0$, then $|a| = -a$

- ⠠i ⠠f ⠠a < 0, ⠠t ⠠h ⠠e n | ⠠a | = - ⠠a

- Is $1 \text{ m} >$ or $<$ 1 yd ?

- ⠠i s 1 ⠠m > or < 1 ⠠y d ?

- $x \geq y$

- ⠠x ⠠ge ⠠y



Negation

Space Before and After

- Not equal to \neq ⠠⠨⠠⠨⠠⠨
- Not less than \nlessgtr ⠠⠨⠠⠨⠠⠨
- Not greater than \ngtr ⠠⠨⠠⠨⠠⠨



Examples

$$\frac{3}{5} \neq \frac{12}{15}$$



$$x \notin 4$$





Other Comparisons

Space Before and After

- Approximately equal to ≈ ⠠⠨⠠⠨⠠⠨⠠⠨
- Similar to ≈ ⠠⠨⠠⠨
- Identically equal to ≡ ⠠⠨⠠⠨
- Congruent to ≅ ⠠⠨⠠⠨⠠⠨⠠⠨
- Ratio ∶ ⠠⠨⠠⠨
- Proportion ∷ ⠠⠨⠠⠨⠠⠨⠠⠨

Examples

■ $1 \text{ ft} \approx \frac{1}{3} \text{ m}$

⠠⠠ ⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠ ⠠⠠ ⠠⠠

■ $4 \equiv 29 \pmod{5}$

⠠⠠⠠ ⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠

■ $\text{angle } ABC \cong \text{angle } DEF$

⠠⠠⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠⠠⠠⠠

■ $5 : 6 :: 15 : ?$

⠠⠠⠠ ⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠⠠ ⠠⠠⠠⠠⠠ ⠠⠠⠠

Miscellaneous Signs and Symbols

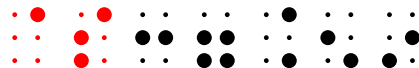
- Cents ¢ ⠠⠠⠠⠠
- Dollars \$ ⠠⠠⠠⠠
- At (space on each side) @ ⠠⠠⠠⠠
- Percent % ⠠⠠⠠⠠
- Prime ' ⠠⠠⠠
- Double Prime " ⠠⠠⠠⠠

Examples

■ 24¢



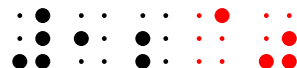
■ \$37.59



■ 5 bags @ 86¢



■ 12%



■ y'



■ 6'4"



More Miscellaneous Signs and Symbols

- Since ∴ ⠠⠠⠠⠠⠠⠠
- Therefore ∵ ⠠⠠⠠⠠⠠⠠
- Number sign, pounds # ⠠⠠⠠⠠⠠⠠
- Slash for "per" / ⠠⠠⠠⠠⠠⠠
- Tally Mark | ⠠⠠⠠⠠⠠⠠
- Ditto Mark " ⠠⠠⠠⠠⠠⠠



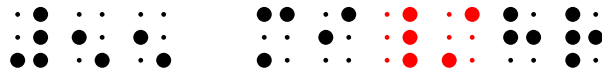
Added Note for Tally Marks

The Multipurpose Indicator, dot 5, must be used between a tally mark and the PI.

Why?

Examples

■ 55 mi/hr



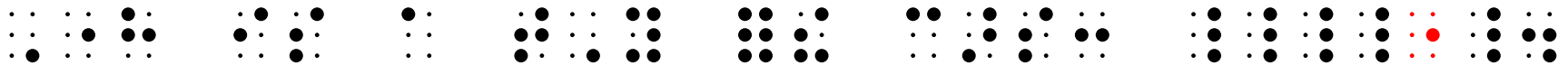
■ He needs 2# of hamburger.



■ $\because -2x+1>7 \therefore x<-3$



■ Here is a tally for the cars: ||||.





Added Notes for Ditto Marks

- A space is left on each side of the ditto mark.
- The symbol is centered under the word or numerals, etc. to be duplicated.
- This may necessitate altering the normal spacing in the line above the ditto marks.

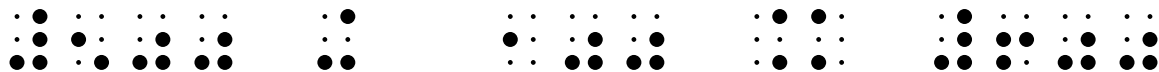


Example of the Ditto Mark

- $500+100 = 600$

600 " " " 700

700 " " " 800





Additional Rules

- The contractions for to ::, into ::::, and by :: may not be used before any of these miscellaneous symbols
- The PI must be used before punctuation that follows any of these miscellaneous symbols



Assignment

- p. 61 all

- p. 64 all