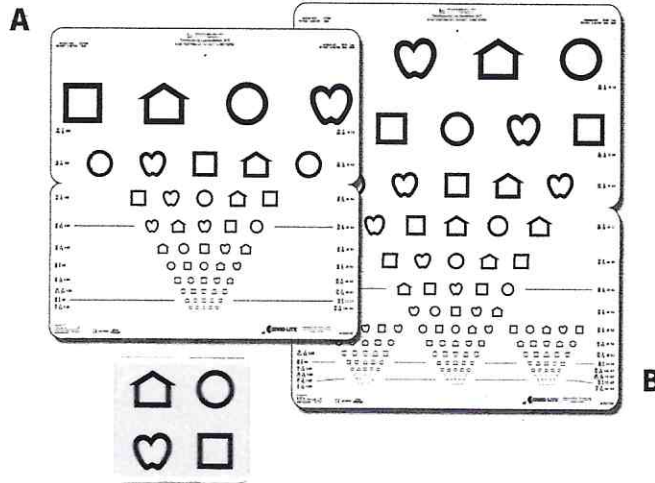


# LEA SYMBOLS®

## 15 Line & 10 Line Distance Chart



A. Distance visual acuity testing, or screening, for children beginning at age 3 years.

B. Distance visual acuity testing for children beginning at age 3 years.

When examining young children, introduce the distance chart to the child after near testing by saying, "Let's look at the same pictures a little further away." Move the chart gradually back to 3 meters (10 feet), while watching the child for signs of inattention. If the child loses interest move closer to 2 meters (80 inches), or one meter (40 inches). Always test well within the visual sphere of the child. Older children may be switched from a near vision test to a 3 meter (10 foot) chart.

### Testing Procedure

- Establish a method of communication such as naming (signing) or pointing (matching). Decide with the child which names will be used to identify the symbols. When needed, train with additional options such as the LEA Puzzle™ (#251600), Response Key Card (#251700), or Flash Cards (#251800).
- Briefly point to the first symbol in each line in descending order when testing binocularly. Do not leave the pointer close to the symbol because it makes fixation easier, especially in case of amblyopia, lazy eye. If the child seems to have difficulties in knowing which line to look at, cover the line above the line to be read with a white card leaving a little of the upper line visible.
- Move down until the child hesitates or misidentifies a symbol.
- Move back up one line and ask the child to identify all the symbols on that line.
- If the child identifies all symbols correctly go to next line with smaller symbols and ask the child to identify all symbols on the line.
- If the child skips a symbol ask the child to try again while briefly pointing to that symbol.
- A child with an amblyopic eye may typically skip symbols within a line of symbols.

- Visual acuity is recorded as the last line on which at least 3 of the 5 symbols are identified correctly.
- When tested at 3 meters (10 feet) the visual acuity value is found in the margin adjacent to that line.
- After obtaining good responses with binocular testing, proceed by testing each eye separately.
- When testing monocularly, use the first symbol of each line or every second line for one eye and the last symbol of each line for the other eye to determine on which line to start testing.

### Testing at Different Distances

If the chart is used at a distance other than the usual 3 meters (10 feet), measure and record the viewing distance and the symbol size (the M value) or the visual acuity value printed at the threshold line.

To determine the visual acuity use one of the following formulas:

$$VA = \frac{\text{Viewing Distance Used (meters)}}{\text{M-value}}$$

OR

$$VA = \frac{\text{Viewing Distance Used (meters or feet)}}{3 \text{ meters (10 feet)}} \times \text{VA value for 3 meters (10 feet)}$$

Note that it is incorrect to report 'V.A. 20/25 at 5feet' if the child could read the 20/25-line (3.8M line) at 5 feet. Visual acuity is in that case:  $5'/10' \times 20/25 = 1/2 \times 20/25 = 20/50$ . (When using the British notation: 6/9 line at 150cm equals:  $1.5m/3m \times 6/9 = 1/2 \times 6/9 = 6/18$ . When using the decimal notation 0.8 at 1.5m equals:  $1.5m/3m \times 0.8 = 1/2 \times 0.8 = 0.4$ )

When the distance is one half (or one third) of the standard distance, the visual acuity value is also one half (one third) of the value printed next to that line.

*M-unit*, metric unit is the distance in meters at which the reference optotype C is seen at a visual angle of 5'.