

Five-Step Rule and Exceptions Lesson 4

Geometry

Activity Answer Key

Reading Geometry Problems

We strongly suggest reviewing the Lesson 4 Special Symbols page which lists the symbols used in this geometry lesson. Then read the following geometry problems using the braille document "L4-Five-Step-Activity.brf." [There is a braille answer document "L4-Five-Step-Activity-Answers.brf" that can be used to independently check answers.]

1. \overline{AB}

Answer 1: segment AB

2. \overrightarrow{CD}

Figure 1 shows a 3x3 grid of 3x3 dot patterns. Each pattern is a 3x3 grid of dots, with some dots filled (black) and others empty (white). The patterns represent different states of a 3x3 grid.

Answer 2: ray CD

3. \overleftrightarrow{EF}

Answer 3: line EF

Find the Error

A teacher read the following problems and the student made a Nemeth error trying to braille what the teacher read. Find the mistake and then write the problem correctly.

1. Teacher: ray CD

Incorrect: The following steps outline what the student wrote:

- a. Multipurpose indicator (dot 5) ⠠
- b. Capital C (dot 6, dots 1-4) ⠠⠠⠠
- c. Capital D (dot 6, dots 1-4-5) ⠠⠠⠠
- d. Contracted right-pointing arrow (dots 1-2-4-6, dots 1-3-5) ⠠⠠⠠
- e. Directly-over indicator (dots 1-2-6) ⠠⠠
- f. Termination indicator (dots 1-2-4-5-6) ⠠⠠

Mistake: The directly-over indicator should come before the contracted right-pointing arrow instead of after.

Correct: \overline{CD}

⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠

2. Teacher: segment EF

Incorrect: The following steps outline what the student wrote:

⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠

- a. Multipurpose indicator (dot 5) ⠠
- b. Capitalization indicator (dot 6) ⠠
- c. Capitalization indicator (dot 6) ⠠
- d. e (dots 1-5) ⠠
- e. f (dots 1-2-4) ⠠
- f. Directly-over indicator (dots 1-2-6) ⠠⠠
- g. Horizontal bar (dots 1-5-6) ⠠
- h. Termination indicator (dots 1-2-4-5-6) ⠠⠠

Mistake: Any capital letter used to name a segment should have a capitalization indicator in front of each letter in its name. A double cap should not be used in the naming of a segment.

Correct: \overline{EF}

⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠