



## Mini-Map for M.EE.HS.A.CED.2-4

Subject: Mathematics

Algebra—Creating Equations (A.CED)

Grade: 10

### Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.HS.A.CED.2-4 Solve one-step inequalities.	<p><b>M.A.CED.2</b> Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</p> <p><b>M.A.CED.3</b> Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.</p> <p><b>M.A.CED.4</b> Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.</p>

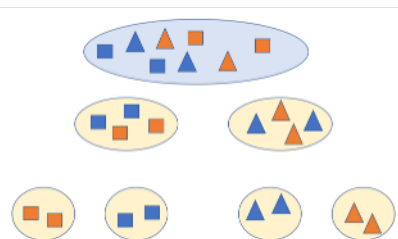
### Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Combine two or more sets of objects or numbers to form a new set. Divide a set of 10 or fewer objects into two or more distinct subsets (e.g., dividing a set containing 10 objects into two subsets containing 4 and 6 objects).	Represent addition, subtraction, multiplication, or division word problems or models with equations (e.g., representing 6 marbles plus 2 marbles equal 8 marbles as $6 + 2 = 8$ marbles).	Solve linear equations involving addition, subtraction, multiplication, or division operations in one variable (e.g., $8.4 + x = 17.56$ ).	Solve linear inequalities in one variable (e.g., $x + 7 < 14$ ), and represent solutions to inequalities on a number line.	Explain a solution to a linear inequality in one variable (e.g., $x < 8$ means that $x$ takes all the values less than 8; i.e., 7, 6, 5...).

## Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

### *How is the Initial Precursor related to the Target?*

The knowledge needed to solve one-step inequalities requires students to manipulate sets (i.e., combining and separating or partitioning). Provide students many opportunities to take a set of objects (e.g., tiles, linking cubes, buttons) and separate them based on a given characteristic (e.g., shape, color, size) into two distinct sets, then separate them again based on another characteristic. Guide students to notice how the set size changes each time you combine or partition the sets.



### *How is the Distal Precursor related to the Target?*

As students begin to understand labeling and counting sets, they begin to use the number sequence and become more adept at tracking individual objects. Work on this skill using a variety of sets, labeling and counting the sets, and moving items in and out of the sets, labeling and counting the set again. Additionally, the educators will pair those sets with the symbolic representations for addition, subtraction, multiplication, and division (e.g.,  $3 + 2 = ?$ ,  $3 \times 2 = ?$ ).

## Instructional Resources

<b>Released Testlets</b>
See the <a href="#">Guide to Practice Activities and Released Testlets</a> .
<b>Using Untested (UN) Nodes</b>
See the document <a href="#">Using Mini-Maps to Plan Instruction</a> .

[Link to Text-Only Map](#)

**M.EE.HS.A.CED.2-4** Solve one-step inequalities.

