Grade 7 - Unit 7 Equations

PR06   Students will be expected to model and solve, concretely, pictorially, and symbolically, problems that can be represented by one-step linear equations of the form $x + a = b$, where a and b are integers.

Performance Indicators

PR06.01   Represent a given problem with a linear equation, and solve the equation using concrete models.
PR06.02   Draw a visual representation of the steps required to solve a given linear equation.
PR06.03   Solve a given problem using a linear equation and record the process.
PR06.04   Verify the solution to a given linear equation using concrete materials and diagrams.
PR06.05   Substitute a possible solution for the variable in a given linear equation into the original linear equation to verify the equality.

Limited	Developing	Competent	In-Depth
Student can represent a given linear equation involving positive integers using concrete materials.	Student can represent and solve a given linear equation involving integers concretely, pictorially, **or** symbolically.	Student can represent **and solve** a given linear equation involving integers concretely, pictorially, **and** symbolically.	Student can solve a linear equation flexibly using **a variety of methods,** record the process and verify solutions.
Student can estimate both reasonable and unreasonable solutions to a problem.	Student can verify solutions to linear equations in the form of $x + a = b$, where a and b are integers, using concrete materials, pictures **or** by substituting a possible value for the variable.	Student can verify solutions to linear equations in the form of $x + a = b$, where a and b are integers, using concrete materials, pictures **and** by substituting a possible value for the variable.	
Student can draw a picture to help make sense of a word problem.	Student can identify the relevant information in a word problem.	Student can create a linear equation in the form of $x + a = b$, where a and b are integers, to solve a given problem and record the process.	Student can create and solve a real-world problem relating to linear equations with a meaningful and relevant context to my own life