

4.2

(3) CST items

Students simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x - 5) + 4(x - 2) = 12$.

Key Vocabulary

Expression
Variable

Equation
Term

Simplify
Like Terms

Solve
Distributive Property

Instructional Objectives

1	Create a list of numbers that “work” and “don’t work” for a given inequality.	1	Consider the inequality: $2x - 3 < 10$ List 10 values of x that “work” in this inequality.
		2	For the inequality shown in item 1, list 10 values of x that “don’t work”.
		3	For the inequality shown in item 1, write one to three sentences describing all values of x which work, and all values of x which don’t work.
		4	For the inequality shown in item 1, draw a picture representing all values of x which work, and all values of x which don’t work.
2	Solve a one- or two-step equation for the value of an unknown variable.	1	Solve for x : $x - 5 = 7$
		2	Solve for x : $-\frac{3}{4}x = -15$
		3	Solve for x : $4x + 9 = 17$
		4	Solve for x : $\frac{1}{2}x - 10 = -4$
3	Simplify expressions before solving inequalities in one variable.	1	Solve for x : $5(x + 1) < 65$
		2	Solve for x : $9x + 4 + -6x > 25$
		3	Solve for x : $2(5x - 6) \geq 6x + 16$
		4	Solve for x : $3(2x - 5) \leq 5(x + 1)$