

Parent and Student clear expectations letter 803, 804, & 807...

This unit begins with a review of the 7th grade skills of solving **two-step equations** using **inverse operations** (integers only). The difficulty level of the equations increases from **two-steps** to **multi-steps** and from **integer coefficients** only to including **decimal and fractions**, at times both representations of numbers in the same equation.

The expectation is the students build an understanding that in solving an equation they are **reversing** the convention of the Order of Operations that they use to simplify/evaluate an equation/expression.

Computation skills with **rational numbers** are strengthened during this unit, as the majority of the calculations will be computed without a calculator. Students should be aware of when to distribute the negative (**which is a common error at this stage**). Students will be provided instruction on the use of the **fraction keys**, **converting fraction to decimal keys** and **simplifying fraction keys** on a calculator.

Students will be instructed on how and when to use the **negative sign** key as opposed to the **minus sign** key.

TARGET A: I can solve two-step equations with rational coefficients.

1. Solve two-step equations with integers - identifying inverse operations
2. Write 2 step equations from description (integers only)
3. Translating verbal into algebraic multi-step equations
4. Solve 2 step decimals, fractions...
5. Solve 2 steps with one decimal and one fraction
6. **Mastery Quiz A** - write and solve two step equations with rational coefficients (no calculator)
7. Teacher Task/Assessment - T3D

TARGET C: I can solve multi-step equations with rational coefficients.

1. Solve multi-step equations with rational coefficients (distribute and combine) with calculator
2. Write and solve multi-step equations with rational coefficients
3. Mastery Quiz C- Solve multi-step equations with rational coefficients
4. Teacher Task/Assessment- T3D

TARGET E: I can solve volume equations

1. Solve volume of a cone problems (skill practice)
2. Solve volume of a cone problems - application practice
3. Mastery Quiz E- Volume of cone and cylinder problems
4. Teacher Task/Assessment - T3D

As the unit progress, students will experience **equations with variables on both sides**, again at first with **integer coefficients** to ease the transition into the new skill and then with **rational coefficients**.

TARGET B/C: I can solve multi-step equations with rational coefficients.

1. Solve multi-step (with combining like terms - integer and rational coefficients)
2. Solve multi-step (with distributive property and combining like terms - integer coefficients only) without calculator
3. Write multi-step problems integer coefficients only
4. **Mastery Quiz B-** (MC) solve equations with integer coefficients that include the distributive property and combining like terms (no calculator)

TARGET D: I can solve multi-step equations with variables on both sides

1. Solve equations with variables on both sides
2. Write and solve equations with variables on both sides
3. Mastery Quiz D- Write and solve equations with variables on both sides
4. Teacher Task/Assessment - T3D

Parent Signature: _____ Date: _____