

Simplification with Algebra Tiles

Learning Objective: To simplify algebraic expressions using algebra tiles.

Durations: 15 – 20 min

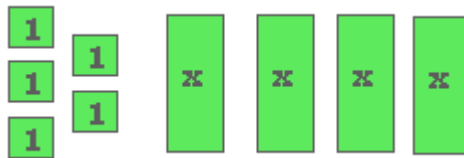
Grades 8 and 9

Material: Algebra tiles

Activity Description:

- ❖ Divide your students into groups of four students
- ❖ Provide each group a set of algebra tiles
- ❖ Ask students to model an expression you write on the board using the algebraic tiles.

Examples: " $5 + 4x$ "

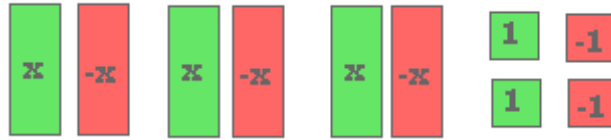


(Introduce the algebraic tiles shapes and color first to students.)

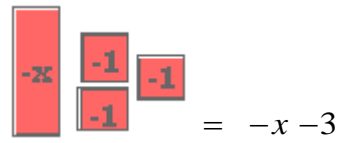
- ❖ Ask students then to represent " $3x + 2 - 4x - 5$ " with their algebraic tiles.



- ❖ Explain the fact that simplifying means collecting like terms (like files)
- ❖ Remove pairs of x tiles and integer tiles like:



5) You will be left with:



This is the simplified expression.

Repeat with more examples till idea is clear to all students.