

Algebra Tiles Equations

Learning Objective: Solve equations with variables using algebra tiles.

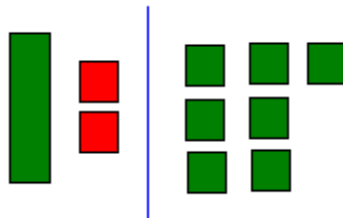
Duration: 15 – 20 min

Grades 7 and 8

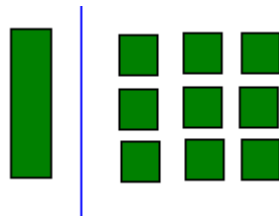
Material: Algebraic Tiles

Activity Description:

- ❖ Divide your students into groups of four students
- ❖ Provide each group a set of algebra tiles
- ❖ Ask students to represent " $x - 2 = 7$ " algebra tiles. (Bar (or a ruler) represent the equal sign.)

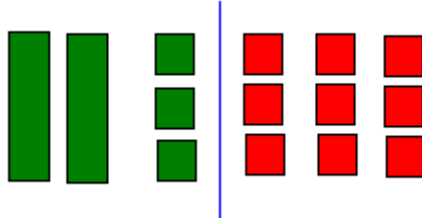


- ❖ To get the x – tile alone, add the opposite color to the other side of the equation, i.e., add two positive integer tiles to the other side,

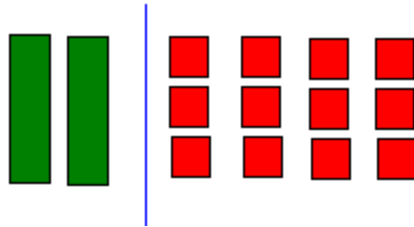


The solution is $x = 9$

- ❖ Ask students to model the expression/ equation " $2x + 3 = -9$ "

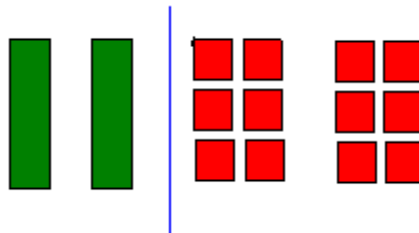


- ❖ Add 3 opposite color to the other side of the equation.

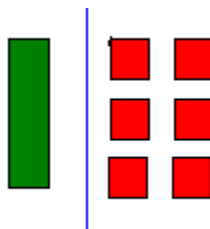


$$2x = -12$$

- ❖ To get one x – tile alone, make two groups of equal number of tiles on each side of the bar equation.



- ❖ Remove one set of tiles from each side of the bar. The solution now, will be clear.



$$x = -6$$