Section 1.8: Solving Equations Using Algebra Tiles

You may use tiles to represent an expression.

This unit tile represents +1	This variable tile or x-tile represents x.
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We can use tiles to solve an equation. For example to solve $x + 2 = 8$:

Draw a vertical line in the center of your page. (This represents the equal sign in the equation).

Arrange tiles on each side of the line to represent the expression or number on each side of the equal sign.

On the left side, place tiles to represent $x + 2$. On the right side place tiles to represent 8.

To get the unit tile by itself we remove two unit tiles (from both sides of the equation).

The tiles now show that $x = 6$.

To verify this is the correct solution, simply replace the x - tile with 6 unit tiles.

As you can see both sides now have 8 unit tiles.