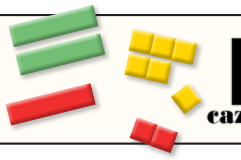
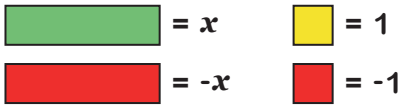
Solving Equations with Unknowns on Both Sides - Using Algebra Tiles



ANSWERS

Here are the algebra tiles we will be using:



Section A

Solve each equation using the algebra tiles.
Write out the equation of each image as you go.

Example

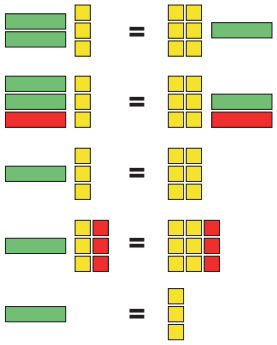
$2x + 3 = x + 6$

$(-x) = (-x)$

$x + 3 = 6$

$(-3) = (-3)$

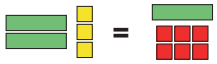
$x = 3$



1) $2x - 3 = x + 6$

$x = 9$

2) $2x + 3 = x - 6$



$x = -9$

3) $2x - 3 = x - 6$

$x = -3$

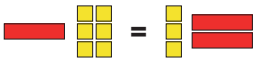
4) $2x - 3 = 6 - x$

$x = 3$

5) $2x + 3 = 6 - x$

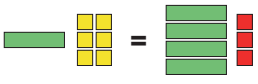
$x = 1$

6) $6 - x = 3 - 2x$



$x = -3$

7) $6 + x = 4x - 3$



$x = 3$

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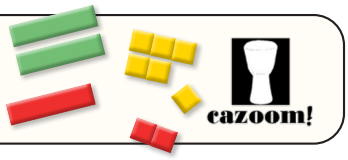

ANSWERS

Section B

Solve each equation using the algebra tiles.
Write out the equation of each image as you go.

1) $x + 9 = 3x + 3$

$x = 3$

2) $3x + 12 = 6x + 3$

$x = 3$

3) $7x - 3 = 5 + 5x$

$x = 4$

4) $7x - 2 = 3x - 10$

$x = -2$

5) $2x - 5 = 4 - x$

$x = 3$

6) $7 - 5x = 4 - 2x$

$x = 1$

7) $10 - 6x = -3x - 8$

$x = 6$

8) $-1 - 6x = -11 - 8x$

$x = -5$