

Solving Algebraic Equations - Check

Name: _____ Class: _____

When you are finished solving for x , one way to check to see if you have the right answer is called the LS – RS Check. In this case, we take the answer for the variable and substitute it back into the original question (just putting the number in for the variable) and getting the answer for each side. If the two sides are equal at the end, then you probably have the right answer.

Example:

$-6x - 42 = 48 + 4x$		
$-6x - 42 + 42 = 48 + 4x + 42$	Left side	Right Side
$-6x = 4x + 90$	$-6(-9) - 42$	$48 + 4(-9)$
$-6x - 4x = 90 + 4x - 4x$	$= 54 - 42$	$= 48 + -36$
$-10x = 90$	$= 12$	$= 12$
$-10x / -10 = 90 / -10$		
$x = -9$		

LS=RS ✓

Now, do the following and check your answer using the LR RS Check.

a) $4x + 12 = 54 - 2x$	Left Side	Right Side
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b) $-16 + 3x = -2x + 49$	Left Side	Right Side
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d) $60 + 6x = -4x + 10$

Left Side

Right Side

e) $4x - 17 + x = 4x - 1 - x$

LS

RS

f) $4x - 4 + 5x = -2x - 10 + 7x$

LS

RS