lame	
ate	Period

Addition Property of Equality

If a = b, then a + c = b + c

Subtraction Property of Equality

If a = b, then a - c = b - c

Addition and Subtraction are Inverse Operations Addition and Subtraction "undo" each other.

Multiplication Property of Equality Division Property of Equality

If a = b, then $a \cdot c = b \cdot c$

If a = b, then $a \div c = b \div c$

Multiplication and Division are Inverse Operations Multiplication and Division "undo" each other.

Left Side = Right Side Any operation done to the left side... ...must be done to the right side Any operation done to the right side... ...must be done to the left side

Combine the variables on one side of the equation.

Always "undo" addition/subtraction before multiplication/division

Solve the following equations for x

Move
$$x$$
's to left side

Move
$$x$$
's to right side

$$2x - 4 = 5x + 8$$

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Solve the following equations for x

$$4x - 12 = -2(x - 3)$$

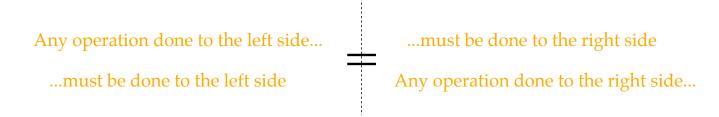
$$4x - 12 = -2(x - 3)$$
 $-3(x + 1) = -2x + 5x - 9$

Solve the following equations for x

$$-3x + 4 = -(x - 6)$$
 $4(x + 4) = -x + 8x - 5$

Addition and Subtraction "undo" each other.

Multiplication and Division "undo" each other.



Combine the variables on one side of the equation. Always "undo" addition/subtraction before multiplication/division