Name _____

Solving One-Step Equations with Addition and Subtracting

Date _____ Period _____

Addition Property of Equality

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

We can add the same value to both sides of an equation and the equation is still a true statement.

Subtraction Property of Equality

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

We can subtract the same value from both sides of an equation and the equation is still a true statement.

Inverse Operations

Pairs of operations that "undo" each other.

Addition and Subtraction are Inverse Operations

Addition and Subtraction "undo" each other.

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

Solve the following equations for x

$x - 5 = 12$

$x + 3 = 11$

$x + 12 = 3$

$x - 6 = -11$

Solve the following equations for x

$x - 7 = 22$

$x + 4 = -18$

$x + 12 = 11$

$7 = x + 9$

$-4 = x - 13$

$-14 = x - 2$

Addition Property of Equality

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

Subtraction Property of Equality

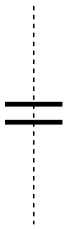
If $a = b$, then $a - c = b - c$

Addition and Subtraction are Inverse Operations

Addition and Subtraction "undo" each other.

Any operation done to the left side...

...must be done to the left side



...must be done to the right side

Any operation done to the right side...