# Common Algebra Mistakes
## Example: Failure to Distribute Minus Sign

## The Goal

Simplify the expression:

$$2x + 2h + 1 - (2x + 1)$$

## The Mistake

Find the algebra mistake:

$$2x + 2h + 1 - (2x + 1) = 2x + 2h + 1 - 2x + 1 = 2 + 2h$$

Need a hint? Look carefully at the red part of the algebra:

$$2x + 2h + 1 - (2x + 1) = 2x + 2h + 1 - 2x\ +1 = 2 + 2h$$

## The Correction

$$2x + 2h + 1 - (2x + 1) = 2x + 2h + 1 - 2x\ -1 = 2h$$

## An Explanation

The minus sign *must* be distributed across *all* terms inside the parentheses: -(2x + 1) = -2x - 1.