## Mixed-type assignments

- $a=10 / 3$;
$\mathrm{n}=10.5+3.7 ;$


## Unary and Binary Operators

* Unary: One operand
$>$ Unary + and -
> Example: $x=-y$; $y=+x$;
- Binary: Two operands
> Example: $x=y+x$;


## Expressions with Multiple Operators

- Example:
$>x=5+3 * 2-1 ;$

What's the value of $x$ ?

* There are rules for the order of evaluation so every computer will calculate the same expression the same way every time


## Order of Evaluation

* Anything in parentheses is evaluated first
> Innermost first
$>$ Any with the same level are evaluated left to right
- Operator precedence
$>$ Unary + and -
$>$ Operators *,/,\%
$>$ Binary + , -

Binary operators evaluated left to right and unary right to left

## Example

* Put in parentheses to indicate order of evaluation
** $x^{*} z+a / b-c * d$


## Program

* Design and write a program to calculate how much money your little sister has in nickels and pennies

