Arithmetic Operators

Objectives:

At the end of this episode, I will be able to:

1. Use arithmetic operators in PowerShell.
2. Understand operator precedence in PowerShell.

Additional resources used during the episode can be obtained using the download link on the overview episode.

* Arithmetic operators
  + Calculate numeric values
  + '+' and '\*' work on strings, arrays, hash tables
  + Method determined by type of leftmost object

|Operator|Description| |:---:|---| |+|Adds integers  
Concatenates strings, arrays, and hash tables| |-|Subtracts one value from another value  
Makes a number a negative number| |\*|Multiplies numbers  
Copies strings and arrays| |/|Divides two values| |%|Returns the remainder of a division operation| |-band|Bitwise AND| |-bnot|Bitwise NOT| |-bor|Bitwise OR| |-bxor|Bitwise XOR| |-shl|Shifts bits to the left the specified number of times| |-shr|Shifts bits to the right the specified number of times|

|Precedence|Operator| |:---:|---| |1|Parenthesis| |2|Negative numbers| |3|Multiplication, Division, Modulo| |4|Addition, Subtraction| |5|Bitwise operations|

External Resources:

During this episode, you can reference the following external resources for supplementary tools and information:

* [About Arithmetic Operators](https://docs.microsoft.com/en-us/powershell/module/microsoft.powershell.core/about/about_arithmetic_operators?view=powershell-7.2)