

Boolean Expressions & Conditionals

Categories

- Numbers, Strings, Variables
- Logical Operators
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Logical Operators

Code Symbol	AP Symbol	Meaning
&&	AND	Logical AND (true only if both are true)
	OR	Logical OR (true if at least one is true)
!	NOT	Logical NOT (true if false, false if true)

Relational Operators

Code Symbol	AP Symbol	Meaning
==	=	Equal to
!=	≠	Not equal to
>	>	Greater than
<	<	Less than
>=	≥	Greater than or equal to
<=	≤	Less than or equal to

Examples

- *Example 1:*
 $x > 10 \text{ AND } y < 20$
True for $x = 11, y = 19$
False for $x = 11, y = 21$
- *Example 2:*
 $\text{NOT } (a == b)$
True for $a = 5, b = 2$
False for $a = 11, b = 11$

Side by Side Comparison

Operation	JavaScript	AP Pseudocode
Assignment	$x = 5$	$x \leftarrow 5$
Equal to	$a == b$	$a = b$
Logical OR	$a b$	$a \text{ OR } b$
Logical AND	$a \&\& b$	$a \text{ AND } b$
Logical NOT	$! a$	$\text{NOT } a$