Name: Programming: Operations

A	Key vocab
Operand	A number (or string or Boolean) which is to be operated on
String manipulation	Operating on strings

B	Unfamiliar operations	
Concatenation	Joins two strings together	":" + "-)"
Exponentiation	Raises one number to the power of another	2**3
Modulus / mod	Returns the remainder after division	10 % 3 = 1
Quotient / floor division	Returns the whole number part of the division	10 // 3 = 3
Unary	Only has one operand	-7

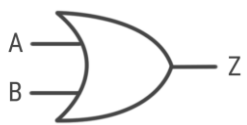
C	Types of operator	
Arithmetic operator	An operator which turns two numbers into a single number with a mathematical process	**, /, %, //, *, +, -
Assignment operator	An operator which assigns a value to a name	=, ⇒
Boolean operator	An operator which compares Boolean values	AND, OR, NOT
Comparison operator	An operator which compares two numbers	>, <, >=, <=, ==, !=

D	Order of operations	
1	**Brackets**	Whatever is in the brackets is resolved first
2	**Unary**	An operation with only one *operand*
3	**Indices**	Raising to the power of a number
4	**Division**	Including *quotient* and *modulus* division
5	**Multiplication**	× or *
6	**Addition**	+
7	**Subtraction**	-
8	**Comparison**	An operation which returns a Boolean by comparing two operands
9	**Boolean**	An operation which returns a Boolean by comparing two Booleans
10	**Assignment**	An operation which assigns a value to a name

E	Logic vocab
Boolean algebra	Mathematical expression of logic circuits
Logic gate	A component which takes in one or two binary inputs and produces a single binary output
Logic circuit	A circuit made of a combination of logic gates
Truth table	A table of inputs and outputs for a logic gate system

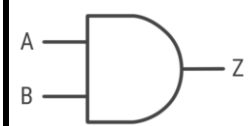
F	Logic gates

OR gate



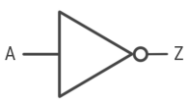
A	B	Z
0	0	0
0	1	1
1	0	1
1	1	1

AND gate



A	B	Z
0	0	0
0	1	1
1	0	1
1	1	1

NOT gate



A	Z
0	1
1	0