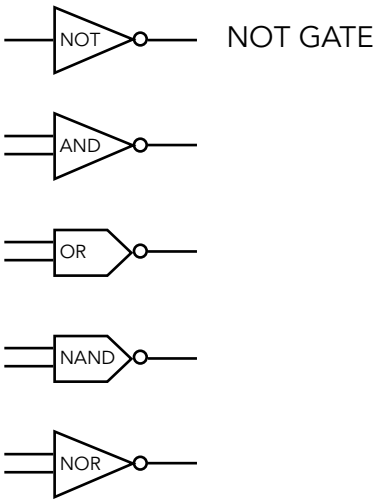
Worksheets for Discrete Math

Logic Symbols	
NOT	¬ or ~
AND	∧
OR	∨
Exclusive OR	⊗, XOR
Logically Equivalent	≡
Conditional	→ if... then....
Bi-Conditional	↔ iff (if and only if)
Therefore	∴
Predicate in χ	P(χ)
For all:	∀
There exists	∃

Application of Logic



n_2 binary or base 2
n_{10} decimal or base 10
n_{16} hexadecimal or base 16

Number Theory and Applications

d | *n* *d* divided *n*

d x *n* *d* does not divide *n*

n div *d* the integer quotient of *n* divided by *d*

n mod *d* the integer remainder of *n* divided by *d*

⌊ χ ⌋the floor of χ

⌈ χ ⌉the ceiling of χ

|x| absolute value of χ

gcd(*a*,*b*) the greatest common divisor of *a* and *b*

lcm(*a*, *b*) the least common multiple of *a* and *b*

Sequences

⋯ and so forth

$\sum_{k=m}^{n} a_k$ the summation of a_k where k=m to *n*

$\prod_{k=m}^{n} a_k$ the product of a_k where *k*=*m* to *n*

n! factonal