# Algebra Symbols

## Binary Relations

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Less than (and not equals) |
|  | Greater than (and not equals) |
|  | Less than or equals |
|  | Greater than or equals |
|  | Equals |
|  | Not equals |

## Unary Operators

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Plus or minus |
|  | Factorial |
|  | Absolute value (distance from zero) |
|  | Square root |
|  | Cube root |
|  | is a function of variable (short: of ) |
|  | Delta, the change in values of variable |
|  | Summation (adding a bunch of stuff up) |

## Constant

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Ratio of a circle circumference to its diameter |
|  | Infinity |

# Geometry Symbols

## Binary Relations

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Congruent, kind of the equals of geometry |
|  | Similar |
|  | Perpendicular |
|  | Parallel |
|  | Not parallel |

## Constant

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Ratio of a circle circumference to its diameter |

## Notations

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Variable representing the measure of an angle (in degrees) |
|  | Line that passes through the points and |
|  | Ray (half line) that starts at and passes through |
|  | Line segment connecting points and |
|  | Denotes an angle (and we don’t care about its measure) |
| or | Denotes the measure of an angle |

# Set Symbols

## Binary Relations

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Union between two sets |
|  | Intersection between two sets |

## Binary Operators

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Element of a set |

## Notation

|  |  |
| --- | --- |
| **Symbol** | **Meaning** |
|  | Empty set, the set with no elements |
|  | The set whose elements are 2, 3, 5, and 7 |
|  | Set of natural numbers, |
|  | Set of integers, |
|  | Set of rational numbers, |
|  | Set of real numbers |