https://www.rapidtables.com/math/symbols/Basic_Math_Symbols.html

Symbol	Symbol Name	Meaning / definition	Example
$\{\ \}$	set	a collection of elements	$A = \{3,7,9,14\}$, $B = \{9,14,28\}$
$A \cap B$	intersection	objects that belong to set A and set B	$A \cap B = \{9,14\}$
$A \cup B$	union	objects that belong to set A or set B	$A \cup B = \{3,7,9,14,28\}$
$A \subseteq B$	subset	A is a subset of B. set A is included in set B.	$\{9,14,28\} \subseteq \{9,14,28\}$
$A \subset B$	proper subset / strict subset	A is a subset of B, but A is not equal to B.	$\{9,14\} \subset \{9,14,28\}$
$A \not\subset B$	not subset	set A is not a subset of set B	$\{9,66\} \not\subset \{9,14,28\}$
$A \supseteq B$	superset	A is a superset of B. set A includes set B	$\{9,14,28\} \supseteq \{9,14,28\}$
$A \supset B$	proper superset / strict superset	A is a superset of B, but B is not equal to A.	$\{9,14,28\} \supset \{9,14\}$
$A \not\supset B$	not superset	set A is not a superset of set B	$\{9,14,28\} \not\supset \{9,66\}$
2^A	power set	all subsets of A	
$\mathcal{P}(A)$	power set	all subsets of A	

Symbol	Symbol Name	Meaning / definition	Example
$\mathcal{P}(A)$	power set	all subsets of A	
$A = B$	equality	both sets have the same members	$A=\{3,9,14\}$, $B=\{3,9,14\}$, $A=B$
A^c	complement	all the objects that do not belong to set A	
$A \setminus B$	relative complement	objects that belong to A and not to B	$A = \{3,9,14\}$, $B = \{1,2,3\}$, $A-B = \{9,14\}$
$A - B$	relative complement	objects that belong to A and not to B	$A = \{3,9,14\}$, $B = \{1,2,3\}$, $A-B = \{9,14\}$
$A \Delta B$	symmetric difference	objects that belong to A or B but not to their intersection	$A = \{3,9,14\}$, $B = \{1,2,3\}$, $A \Delta B = \{1,2,9,14\}$
$A \ominus B$	symmetric difference	objects that belong to A or B but not to their intersection	$A = \{3,9,14\}$, $B = \{1,2,3\}$, $A \ominus B = \{1,2,9,14\}$
$a \in A$	element of, belongs to	set membership	$A=\{3,9,14\}$, $3 \in A$

https://beginnersbook.com/2015/04/dbms-tutorial/

Types of operations in relational algebra

We have divided these operations in two categories:
1. Basic Operations
2. Derived Operations

Basic/Fundamental Operations:

1. Select (σ)
2. Project (∏)
3. Union (∪)
4. Set Difference (-)
5. Cartesian product (X)
6. Rename (ρ)

Derived Operations:

1. Natural Join (⋈)
2. Left, Right, Full outer join (⟕, ⟗, ⟖)
3. Intersection (∩)
4. Division (÷)