

$$a = 1$$

$$b = 2$$

$$c = -3$$

$$x^2 + 2x - 3 = 0$$

1.1

$$x^2 + 2x - 3 + 3 = 0 + 3$$

$$x^2 + 2x = 3$$

$$\Delta = b^2 - 4ac$$

$$\Delta = 2^2 - 4 \cdot 1 \cdot (-3)$$

$$\Delta = 4 + 12$$

$$\Delta = 16$$

$$x = \frac{-b \pm \sqrt{\Delta}}{2a}$$

$$x = \frac{-2 \pm \sqrt{16}}{2 \cdot 1}$$

$$x' = \frac{-2 + 4}{2} = \frac{2}{2} = 1$$

$$x'' = \frac{-2 - 4}{2} = \frac{-6}{2} = -3$$

$$x^2 + 1x + 1x = 3$$

	x	1
x	x^2	$1x$
1	$1x$	1

$$\therefore x + 1 = \sqrt{4}$$

$$x + 1 = 2$$

$$x = 1$$

	$x + 1$
x	3
1	1

$\sqrt{4}$

$$x + 1 = -\sqrt{4}$$

$$x + 1 = -2$$

$$x + 1 = -2$$

$$x = -3$$

~~$x^2 + 4x - 12 = 0$~~

$$a=1, b=4, c=-12 \quad x^2 + 4x - 12 = 0$$

$$\Delta = b^2 - 4 \cdot a \cdot c$$

$$\Delta = 4^2 - 4 \cdot 1 \cdot (-12)$$

$$\Delta = 16 + 48$$

$$\Delta = 64 \Rightarrow \sqrt{\Delta} = \sqrt{64} = 8$$

$$x = \frac{-b \pm \sqrt{\Delta}}{2 \cdot a} = \frac{-4 \pm \sqrt{64}}{2 \cdot 1} = \begin{cases} \frac{-4+8}{2} = \frac{4}{2} = \boxed{2} \\ \frac{-4-8}{2} = \frac{-12}{2} = \boxed{-6} \end{cases}$$

$$x^2 + 4x - 12 = 0$$

$$x^2 + 4x - 12 + 12 = 0 + 12$$

$$x^2 + 4x = 12$$

$$x^2 + 2x + 2x = 12$$

	x	2
x	x^2	$2x$
2	$2x$	4

$$\Rightarrow \begin{array}{|c|c|} \hline x+2 & \\ \hline 12 & \\ \hline \sqrt{16} & 4 \\ \hline \end{array}$$

$$\sqrt{16} \Rightarrow x+2 = \sqrt{16}$$

$$x+2 = 4$$

$$x+2-2 = 4-2$$

$$\boxed{x = 2}$$

$$x+2 = -\sqrt{16}$$

$$\therefore \boxed{x = -6}$$

$$x+2 = -4$$

$$x+2-2 = -4-2$$

CONJUNTOS

①

UNITÁRIO
 $A = \{1\}$

SÓ UM ELEMENTO

VAZIO
 $A = \{ \}$

NÃO POSSUI
ELEMENTOS

UNIVERSO
 $A = \{a, b, c, \dots, z\}$

TOCOS ELEMENTOS
POSSÍVEIS EM UM
DADO UNIVERSO

DISJUNTO
 $A = \{1, 2\}$
 $B = \{5, 7\}$

NÃO POSSUEM
ELEMENTOS EM
COMUM

FINITO
 $A = \{1, 5, 7\}$

NÚMERO FINITO
DE ELEMENTO

INFINITO
 $A = \{0, 1, 2, \dots\}$

NÚMERO INFINITO
DE ELEMENTOS

SUBCONJUNTO
 $A = \{1, 2, 3, 4\}$
 $B = \{1, 3\}$

B É UM SUBCONJUNTO
DE A

SÍMBOLOGIA

$C \rightarrow$ CONTEDO.

$\emptyset \rightarrow$ N CONTEDO.

$\supset \rightarrow$ CONTEM.

$\not\supset \rightarrow$ N CONTEM.

$\cup \rightarrow$ UNIÃO.

$\cap \rightarrow$ INTERSEÇÃO

$- \rightarrow$ DIFERENÇA.

$\bar{A}, A' \rightarrow$ COMPLEMENTO.

TABELA VERDADE

OU

A	B	A OU B
V	V	V
V	F	V
F	V	V
F	F	F

E

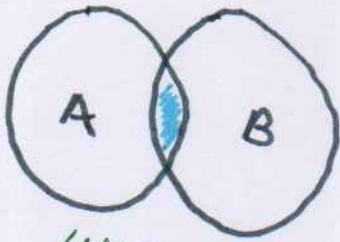
A	B	A E B
V	V	V
V	F	F
F	V	F
F	F	F

NEG

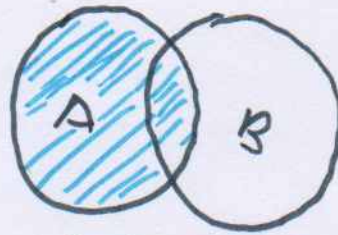
A	B	$\sim A$	$\sim B$
V	V	F	F
V	F	V	V
F	V	V	F
F	F	V	V

SQL JOIN

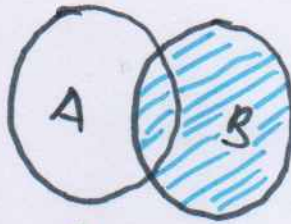
(2)



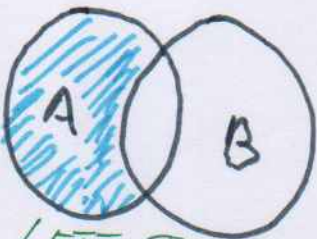
INNER JOIN



LEFT JOIN

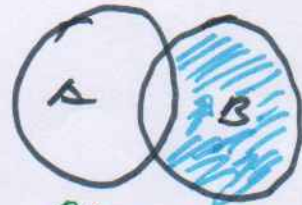


RIGHT JOIN



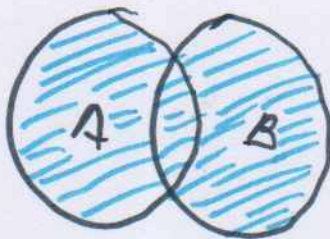
LEFT JOIN

WHERE B.KEY IS NULL



RIGHT JOIN

WHERE A.KEY IS NULL



FULL OUTER JOIN

~~WHERE~~ A.KEY = B.KEY
ON



FULL OUTER JOIN

WHERE A.KEY IS NULL
OR B.KEY IS NULL