

# Insiemi ver 0.01

prima versione

- CREA LISTA  $i\_createN(\text{Inizio}, \text{Fine}, \text{Incremento}, \text{"condizione"})$

```
*insiemi GRAD X
n:=i_createN(-5,5,1,"n=n")
{-5,-4,-3,-2,-1,0,1,2,3,4,5}
n:=i_createN(-5,5,1,"n/2=int(n/2)")
{-4,-2,0,2,4}
n:=i_createN(-5,5,1,"n/2!=int(n/2)")
{-5,-3,-1,1,3,5}
n:=i_createN(-5,5,1,"n^2=4")
{-2,2}
{ }
```

- UNIRE  $i\_uni(\text{listaA}, \text{ListaB})$

```
*insiemi GRAD X
i_uni({1,3,4,5,3},{1,2,3}) {1,2,3,3,4,5}
```

- INTERSEZIONE  $i\_int(\text{listaA}, \text{ListaB})$

```
i_int({1,3,4,5,3},{1,2,3}) {1,3}
```

- ORDINA  $i\_sort(\text{listaA}, \text{inizio}, \text{fine})$  inizio e fine =void

```
*insiemi GRAD X
i_sort({5,4,5,3,2,1},1,6) {1,2,3,4,5,5}
i_sort({5,4,5,3,2,1},_,_) {1,2,3,4,5,5}
```

- COMPLEMENTO  $i\_comp(\text{ambiente}, \text{lista})$

```
i_comp({1,2,3,4,5,6,7},{3,5})
{1,2,4,6,7}
```

## Esempio

Si considerino i seguenti sottoinsiemi di  $\mathbb{Z}$

$$A = \{x : x \in \mathbb{Z}, x < 4\}$$

$$B = \{y : y \in \mathbb{Z}, y^2 = 4\}$$

$$C = \{s : s \in \mathbb{Z}, s \text{ è pari} \}.$$

L'insieme  $(A \cap C)^c \cup B$  è uguale a:

```
z:=i_createn(-11,7,1,"n=n")  
      {-11,-10,-9,-8,-7,-6,-5,-4,-3,-2,-1,0,1,2,3,4,5,6,7}  
c:=i_createn(-11,7,1,"n/2=int(n/2)")      {-10,-8,-6,-4,-2,0,2,4,6}  
a:=i_createn(-11,7,1,"n<4")  
      {-11,-10,-9,-8,-7,-6,-5,-4,-3,-2,-1,0,1,2,3}  
b:=i_createn(-11,7,1,"n·n=4")      {-2,2}  
i_uni(i_comp(z,i_int(a,c)),b)      {-11,-9,-7,-5,-3,-2,-1,1,2,3,4,5,6,7}
```

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