100 · 10 + 100 · 10

Allineciamo a esponente più grande

$100 \cdot 10^0 = 100 \cdot 10^0$

$100 \cdot 10^{-2} = 1 \cdot 10^0$

$101 \cdot 10^0$

$100 \cdot 10^0 \cdot 100 \cdot 10^{-2} = (100 \cdot 100) \cdot 10^{(0-2)} =$

$= 10000 \cdot 10^{-2}$

Allineamento => Approssimazione

$1,9099 \cdot 10^1 \Rightarrow 1909,9 \cdot 10^4$

$5,9009 \cdot 10^4 \Rightarrow 5,9009 \cdot 10^4$ $1915,8009 \cdot 10^4$

$00,001,9099 \cdot 10^4$ $\quad 00,0019 \cdot 10^4$

$5,9009 \cdot 10^4$ $\quad 5,9009 \cdot 10^4$ $\quad 5,9028 \cdot 10^4$

IEEE: 754

Singola Precisione 32 bit — 1: S, 8: EEEEEEEE, 23: MMM...M

Doppia Precisione 64 bit — 1: S, 11: E, 52: M

Estesa 80 bit

Esponente Eccesso $K = $ 127 Single $2^7 - 1$?; 1023 Double $2^{10} - 1$

Valori $[-126; 127]$

$-127; 128$ → Casi Particolari

Esponente

1 0 1 1 0 0 0 1 1 -

0 1 1 1 1 1 1 1 1 =

0 1 1 1 1 1 1 0 0

1. 0 0 0 0 0 1 —

0 1 1 1 1 1 1 1 = 127 ?

0 0 0 0 0 0 1 0

1 | 1 0 0 0 0 0 0 1 | 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 . . .

1, 01

−

129 − 127

2

1, 0 1   1

1, 25

$-1,25 \cdot 2^2$

$-1,25 \cdot 4$

$= 5$