

# Floating point Numbers

✓ 20 20.02 2.2 35.3 314  
0.334

911.0E2

$9.8 \times 10^{-19}$

$9.8 \times 10^5$

$9.8 \times 100000$

$9.8 \times 10^{-19}$   
 $10^{19}$

980000

$-9.8 \times 10^5$   
 $-9.8 \times 10^{-5}$

$-9.8 \times 10^5$   
 $9.8$   
 $100000$

$-0.000098$

float  $\rightarrow$  32 bit / 4 byte

double  $\rightarrow$  64 bit / 8 byte

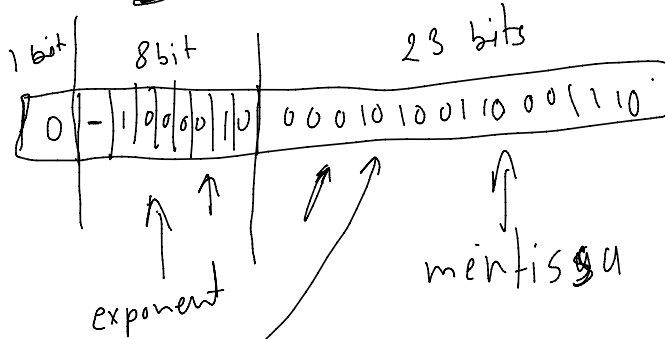
long double  $\rightarrow$  80, 96, 128 / 10, 12, 16 byte

133  
127+6

IEEE 754

$+ 9.8 \times 10^5$

float (32)



$0.98 \times 10^6$

000001100111000001  
23

