Gustavo Soares Silva

3. Lista 3

1) 0000 0000 0000 0000 0001 0000 0000 0000

2) 1111 1011 1111 1111 1111 1000 0000 0001

3) 1110 1111 1110 0001 0111 1011 1000 0000

4) 250

5) 17

6) 2 147 483 665

10)
```
add $t1, $t3, $t4
slt $t2, $t1, $0
```

12)

$2,850 \times 10^3 + 2,840 \times 10^4 \rightarrow$

$0,285 \times 10^4 + 2,840 \times 10^4$

$10,125 \times 10^4$

$1,012 \times 10^5$ //

$2,850 \times 10^3 + 2,840 \times 10^4 \rightarrow$

$0,029 \times 10^5 + 0,284 \times 10^5$

$1,013 \times 10^5$ //

4-121

(34) $20_{dec} = 10100_2 = 1,0100 \times 2^4$

0	1	0	0	0	0	1	0	1	0	1	0	0	...	0
5	Expoente							Mantissa						

22 0 — single precision

0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	...	0
Expoente											Mantissa					

51 0 — double precision

(36) $0,1_{10} \times 2 = 0,2 \times 2 = 0,4 \times 2 = 0,8 \times 2 = 1,6 \times 2 = 1,2$

$0,0001100110011001100 = 1,10011001100110011 \times 2^{-4}$

0	0	1	1	1	1	0	1	1	0	0	1	1	0	...	1	0	0	1
5	Expoente							Mantissa										

22 0 — single precision

0	0	1	1	1	1	1	1	1	1	0	1	1	0	0	1	...	1	0	0	1
5	Expoente										Mantissa									

51 0 — double precision

(39) a) $x + y =$ $x = (-1)^0 \times (1 + 0,101100...0) \times 2^{-115+127=12}$

$x = 1,1011 \times 2^{12}$

b) $x * y =$

27647,5625 $x = 11011\,0000\,0000_2$ -12096

$x = 27648_{10}$

$y = (-1)^1 \times (1 + 0,1100...) \times 2^{-124}$

$y = -1,11 \times 2^{124}$ $y = -0,4375$