

## Lista de Exercício: ① Binário para Decimal

- 1 -  $11001_2 \rightarrow 1 + 8 + 16 = 25_{10}$
- 2 -  $101101011_2 \rightarrow 1 + 2 + 8 + 32 + 64 + 256 = 363_{10}$
- 3 -  $10001111_2 \rightarrow 1 + 2 + 4 + 8 + 128 = 143_{10}$
- 4 -  $111010010_2 \rightarrow 2 + 16 + 64 + 128 + 256 = 466_{10}$
- 5 -  $10110011101_2 \rightarrow 1 + 4 + 8 + 16 + 128 + 256 + 1024 = 1581_{10}$
- 6 -  $110010110101_2 \rightarrow 1 + 4 + 16 + 32 + 128 + 1024 + 2048 = 3253_{10}$
- 7 -  $111_2 \rightarrow 1 + 2 + 4 = 7_{10}$
- 8 -  $1001_2 \rightarrow 8 + 1 = 9_{10}$
- 9 -  $10000_2 \rightarrow 16_{10}$
- 10 -  $110000_2 \rightarrow 8 + 16 + 32 = 56_{10}$
- 11 -  $101200_2 \rightarrow \text{X}$
- 12 -  $1011011_2 \rightarrow 1 + 2 + 8 + 16 + 64 = 91_{10}$
- 13 -  $1100101_2 \rightarrow 1 + 4 + 32 + 64 = 101_{10}$
- 14 -  $11101_2 \rightarrow 1 + 4 + 8 + 16 = 29_{10}$
- 15 -  $11101011_2 \rightarrow 1 + 2 + 8 + 32 + 64 + 128 = 235_{10}$
- 16 -  $11101000_2 \rightarrow 8 + 16 + 64 + 128 = 232_{10}$
- 17 -  $11010001001_2 \rightarrow 1 + 8 + 16 + 256 + 1024 + 2048 = 3353_{10}$
- 18 -  $10001101_2 \rightarrow 1 + 4 + 8 + 16 + 256 = 285_{10}$
- 19 -  $1101111110_2 \rightarrow 2 + 4 + 8 + 16 + 32 + 64 + 128 + 1024 + 2048 = 3326_{10}$
- 20 -  $11101_2 \rightarrow 1 + 4 + 8 + 16 = 29_{10}$

## ② Decimal para binário

- 1 -  $10_{10} \rightarrow 1010_2$
- 2 -  $67_{10} \rightarrow 1000011_2$
- 3 -  $450_{10} \rightarrow 111000010_2$
- 4 -  $999_{10} \rightarrow 1111100111_2$
- 5 -  $325_{10} \rightarrow 101000101_2$
- 6 -  $650_{10} \rightarrow 1010001010_2$
- 7 -  $77_{10} \rightarrow 1001101_2$

- 8-  $189_{10} \rightarrow 10111101_2$   
 9-  $234_{10} \rightarrow 11101010_2$   
 10-  $74_{10} \rightarrow 1001010_2$   
 11-  $167_{10} \rightarrow 10100111_2$   
 12-  $83_{10} \rightarrow 1010011_2$   
 13-  $1600_{10} \rightarrow 1100100000_2$   
 14-  $999_{10} \rightarrow 1111100111_2$   
 15-  $750_{10} \rightarrow 1011101110_2$   
 16-  $27_{10} \rightarrow 11011_2$   
 17-  $1991_{10} \rightarrow 11111000111_2$   
 18-  $2030_{10} \rightarrow 11111100100_2$   
 19-  $01112002_{10} \rightarrow 10000111101111000010_2$   
 20-  $19_{10} \rightarrow 10011_2$

## Lista 2 -

octagonal em binário	octagonal em decimal
1- $405_8 \rightarrow 100200101_2$	1- $75_8 \rightarrow 7 \cdot 8 + 5 \cdot 8^0 = 61_{10}$
2- $477_8 \rightarrow 10011111_2$	2- $66_8 \rightarrow 6 \cdot 8 + 6 \cdot 8^0 = 54_{10}$
3- $237_8 \rightarrow 1001111_2$	3- $48_8 \rightarrow \text{Z}$
4- $46_8 \rightarrow 100110_2$	4- $40_8 \rightarrow 4 \cdot 8 + 0 \cdot 8^0 = 32_{10}$
5- $705_8 \rightarrow 111000101_2$	5- $36_8 \rightarrow 3 \cdot 8 + 6 \cdot 8^0 = 30_{10}$
6- $173_8 \rightarrow 111011_2$	6- $37_8 \rightarrow 3 \cdot 8 + 7 \cdot 8^0 = 31_{10}$
7- $201_8 \rightarrow 010000001_2$	7- $05_8 \rightarrow 0 \cdot 8 + 5 \cdot 8^0 = 5_{10}$
8- $452_8 \rightarrow 100101010_2$	8- $50_8 \rightarrow 5 \cdot 8 + 0 \cdot 8^0 = 40_{10}$
9- $2136_8 \rightarrow 01000101110_2$	9- $121_8 \rightarrow 1 \cdot 8^2 + 2 \cdot 8 + 1 \cdot 8^0 = 81_{10}$
10- $1741_8 \rightarrow 111100001_2$	10- $65_8 \rightarrow 6 \cdot 8 + 5 \cdot 8^0 = 53_{10}$
11- $613_8 \rightarrow 110001011_2$	11- $22_8 \rightarrow 2 \cdot 8 + 2 \cdot 8^0 = 18_{10}$
12- $546_8 \rightarrow 101100110_2$	12- $45_8 \rightarrow 4 \cdot 8 + 5 \cdot 8^0 = 37_{10}$
13- $120_8 \rightarrow 1010000_2$	13- $75_8 \rightarrow 7 \cdot 8 + 5 \cdot 8^0 = 61_{10}$
14- $317_8 \rightarrow 01100111_2$	14- $86_8 \rightarrow \text{Z}$
15- $720_8 \rightarrow 111010000_2$	15- $42_8 \rightarrow 4 \cdot 8 + 2 \cdot 8^0 = 34_{10}$
16- $665_8 \rightarrow 110110101_2$	