

**Lista de exercícios 1**

Professor: Gustavo Henrique Borges Martins

Aluno: \_\_\_\_\_ Matrícula: \_\_\_\_\_

**Atividade Proposta**

1. (1 ponto) Converta os seguintes números para as bases indicadas:

1.  $188 \rightarrow \text{base } 2$
2.  $143 \rightarrow \text{base } 2$
3.  $67 \rightarrow \text{base } 2$
4.  $210 \rightarrow \text{base } 2$
5.  $127 \rightarrow \text{base } 2$
6.  $108 \rightarrow \text{base } 2$
7.  $172 \rightarrow \text{base } 2$
8.  $82 \rightarrow \text{base } 2$
9.  $116 \rightarrow \text{base } 2$
10.  $68 \rightarrow \text{base } 2$
11.  $11000110_2 \rightarrow \text{base } 10$
12.  $00101010_2 \rightarrow \text{base } 10$
13.  $01111011_2 \rightarrow \text{base } 10$
14.  $01110001_2 \rightarrow \text{base } 10$
15.  $00110001_2 \rightarrow \text{base } 10$
16.  $11011110_2 \rightarrow \text{base } 10$
17.  $00011111_2 \rightarrow \text{base } 10$
18.  $00101001_2 \rightarrow \text{base } 10$
19.  $00110100_2 \rightarrow \text{base } 10$
20.  $10000111_2 \rightarrow \text{base } 10$
21.  $10111100_2 \rightarrow \text{base } 3$
22.  $20222_3 \rightarrow \text{base } 8$
23.  $274_8 \rightarrow \text{base } 16$
24.  $BC_{16} \rightarrow \text{base Fibonacci, com representação Zeckendorf}$
25.  $10010010010_{\text{Zeck}} \rightarrow \text{base } \phi$

2. (1 ponto) Realize as operações indicadas e escreva os números nas bases das operações:

1.  $34 + 126$
2.  $01110001_2 + 00110001_2$
3.  $11011110_2 + 00011111_2$
4.  $00101001_2 + 00110100_2$
5.  $10111111_2 + 00101110_2$
6.  $00101001_2 + 10000111_2$
7.  $10010001_2 + 01110001_2$
8.  $10111100_2 + 01000011_2$
9.  $11110001_2 + 10101011_2$
10.  $33_{16} + 77_{16}$
11.  $11010010_2 - 10001111_2$
12.  $00111111_2 \times 00000101_2$
13.  $10101100_2 / 00000101_2$
14.  $00010100_2 \vee 00000011_2$
15.  $01000000_2 \wedge 11001011_2$
16.  $\neg 10101001_2 \vee \neg 1101011_2$
17.  $\neg(\neg 11010011_2 \vee \neg 00010111_2)$
18.  $\neg(\neg 00000000_2)$
19.  $10101010_2 \oplus 10101010_2$
20.  $10110110_2 \oplus 00011101_2$
21.  $0C_{16} \times 6B_{16}$
22.  $54_{16} / 8_{16}$
23.  $32_{16} \wedge DD_{16}$
24.  $88_{16} \vee 1A_{16}$
25.  $10010100000_{\text{Zeck}} - 10000010_{\text{Zeck}}$

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Questões	1	2	Total
Total de pontos	1	1	2
Pontos obtidos			