**Ficha de revisões – SDAC mod. 1**

**1. Completa o esquema abaixo**

Divide

Multiplica

0…7

**2. Completa as seguintes tabelas**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Num sistema \_\_\_\_\_\_\_\_\_\_ são necessários \_\_\_ bits para fazer todas as representações** | | | | | **22** | **21** | **20** |  | | **4** | **2** | **1** |  | |  |  |  | **=0** | | **0** | **0** | **1** | **=1** | |  |  |  | **=2** | |  |  |  | **=3** | |  |  |  | **=4** | |  |  |  | **=5** | |  |  |  | **=6** | |  |  |  | **=7** | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Num sistema hexadecimal são necessários 4 bits para fazer todas as representações** | | | | | | **23** | **22** | **21** | **20** |  | | **8** | **4** | **2** | **1** |  | |  |  |  |  | **=0** | | **0** | **0** | **0** | **1** | **=1** | |  |  |  |  | **=2** | |  |  |  |  | **=3** | |  |  |  |  | **=4** | |  |  |  |  | **=5** | |  |  |  |  | **=6** | |  |  |  |  | **=7** | |  |  |  |  | **=8** | |  |  |  |  | **=9** | |  |  |  |  | **=A, 10** | |  |  |  |  | **=B, 11** | |  |  |  |  | **=C, 12** | |  |  |  |  | **=D, 13** | |  |  |  |  | **=E, 14** | |  |  |  |  | **=F, 15** | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **29** | **28** | **27** | **26** | **25** | **24** | **23** | **22** | **21** | **20** |
|  |  |  |  |  | **16** |  |  | **2** | **1** |

**3. Tendo por base as tabelas preenchidas na página anterior. Complete a seguinte tabela:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Binário** | **Octal** | **Decimal** | **Hexadecimal** |
|  |  | **38** |  |
| **111** | **7** | **7** | **7** |
|  | **33** |  |  |
|  |  |  | **1F** |
| **011** |  |  |  |
|  | **456** |  |  |
|  |  | **128** |  |
|  | **521** |  |  |
|  |  |  | **ABC** |
|  |  | **256** |  |
| **10101010** |  |  |  |
|  |  |  | **9AF** |
|  |  | **356** |  |
| **11110000** |  |  |  |
|  |  |  | **239** |
|  | **3241** |  |  |
|  |  | **104** |  |
| **101111** |  |  |  |
|  |  | **404** |  |
|  |  |  | **A51** |
|  | **555** |  |  |
| **1101111** |  |  |  |
|  |  | **333** |  |

**4.** Quais são as medidas de informação que estudou?

**5.** 8 GB correspondem a quantos bytes? Faça as operações necessárias.

**6.** 2 TB correspondem a quantos bytes? Faça as operações necessárias.

**7.** Faça as seguintes conversões de **decimal para binário**.

* 1. 467 (10)-----------(2)
  2. 375(10)--------------(2)
  3. 16(10)----------------(2)
  4. 123(10)-------------(2)

e. 1024(10)-----------(2)

8. Faça as seguintes conversões de binário para decimal.

* 1. 101110(2)
  2. 1111111(2)
  3. 10001(2)
  4. 1011101101(2)

9. Faça as seguintes conversões de octal para decimal.

* 1. 467 (8)
  2. 375(8)
  3. 16(8)
  4. 123(8)

10. Faça as seguintes conversões de hexadecimal para decimal.

* 1. 2FA45 (16)
  2. FF(16)
  3. 11B(16)
  4. 123(16)

**Sistemas de numeração:**

11. Faça as seguintes conversões de **octal para binário.**

* 1. 24(8)
  2. 175(8)
  3. 632(8)

12. Faça as seguintes conversões de **hexadecimal para binário**.

* 1. 2AD(16)
  2. F0E3(16)
  3. 879(16)
  4. BCD(16)

13. Faça as seguintes conversões de **binário para octal.**

* 1. 100110011(2)
  2. 11000010(2)
  3. 10101010(2)

14. Faça as seguintes conversões de **binário para hexadecimal**.

* 1. 100110011(2)
  2. 110010010(2)
  3. 10101010(2)

15. Faça as seguintes conversões de decimal para binário.

* 1. 25(10)
  2. 570(10)
  3. 1232(10)
  4. 209(10)

16. Faça as seguintes conversões de decimal para octal.

* 1. 2534 (10)
  2. 127(10)
  3. 34(10)
  4. 75(10)

17. Faça as seguintes conversões de decimal para hexadecimal.

* 1. 4096 (10)
  2. 127(10)
  3. 170(10)
  4. 759(10)