**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** |  |

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

**3.** 8 GB correspondem a quantos bytes? Faça as operações necessárias.

**4.** 2 TB correspondem a quantos bytes? Faça as operações necessárias.

**5.** 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)

1. Faça as seguintes conversões de binário para decimal.
   1. 101110(2)
   2. 1111111(2)
   3. 10001(2)
   4. 1011101101(2)
2. Faça as seguintes conversões de octal para decimal.
   1. 467 (8)
   2. 375(8)
   3. 16(8)
   4. 123(8)
3. Faça as seguintes conversões de hexadecimal para decimal.
   1. 2FA45 (16)
   2. FF(16)
   3. 11B(16)
   4. 123(16)

**Sistemas de numeração:**

1. Faça as seguintes conversões de **octal para binário.**
   1. 24(8)
   2. 175(8)
   3. 632(8)
2. Faça as seguintes conversões de **hexadecimal para binário**.
   1. 2AD(16)
   2. F0E3(16)
   3. 879(16)
   4. BCD(16)
3. Faça as seguintes conversões de **binário para octal.**
   1. 100110011(2)
   2. 11000010(2)
   3. 10101010(2)
4. Faça as seguintes conversões de **binário para hexadecimal**.
   1. 100110011(2)
   2. 110010010(2)
   3. 10101010(2)
5. Faça as seguintes conversões de decimal para binário.
   1. 25(10)
   2. 570(10)
   3. 1232(10)
   4. 209(10)
6. Faça as seguintes conversões de decimal para octal.
   1. 2534 (10)
   2. 127(10)
   3. 34(10)
   4. 75(10)
7. Faça as seguintes conversões de decimal para hexadecimal.
   1. 4096 (10)
   2. 127(10)
   3. 170(10)
   4. 759(10)