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**Converting Decimal to Binary**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: 7th**

Use the following table to help you to convert the Decimal numbers to Binary Numbers:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 210 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 |
| 1024 | 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |

**Write each decimal number as a binary number:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1- Decimal = (33) 10 Binary =

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **32** | **16** | **8** | **4** | **2** | **1** |
| **1** | **0** | **0** | **0** | **0** | **1** |

***(10001)2*** | 2- Decimal = (50) 10 Binary =

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 32 | 16 | 8 | 4 | 2 | 1 |
| **1** | **1** | **0** | **0** | **1** | **0** |

***(110010)2*** |
| 3- Decimal = (29) 10 Binary =

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 16 | 8 | 4 | 2 | 1 |
| 1 | 1 | 1 | 0 | 1 |

***(11101)2*** | 4- Decimal = (44) 10 Binary =

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 32 | 16 | 8 | 4 | 2 | 1 |
| 1 | 0 | 1***(101100)2*** | 1 | 0 | 0 |

 |
| 5- Decimal = (19) 10 Binary =

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 16 | 8 | 4 | 2 | 1 |
| 1 | 0 | 0 | 1***(10011)2*** | 1 |

 | 6-Decimal = (22) 10 Binary =

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 16 | 8 | 4 | 2 | 1 |
| 1 | 0 | 1 | 1 | 0 |

***(10110)2*** |