Representations of numbers in different bases

Fill in the table; each row should have the same number represented in decimal, binary, hexadecimal, and octal

|  |  |  |  |
| --- | --- | --- | --- |
| Decimal | Binary | Hexidecimal | Octal |
| 15 |  |  |  |
| 14 |  |  |  |
| 13 |  |  |  |
| 12 |  |  |  |
| 11 |  |  |  |
| 10 |  |  |  |
| 9 |  |  |  |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  |  |
| 3 |  |  |  |
| 2 |  |  |  |
|  |  | 1 |  |
|  |  | 0 |  |
|  | 10000 |  |  |
|  |  |  | 23 |
|  |  |  | 31 |
| 31 |  |  |  |
|  | 101010 |  |  |
| 45 |  |  |  |
|  |  | 76 |  |
| 113 |  |  |  |
|  |  | 113 |  |
|  | 11101111 |  |  |
|  |  |  | 160 |
|  |  | 160 |  |
| 160 |  |  |  |
|  | 11111000 |  |  |
| 208 |  |  |  |
|  |  | 208 |  |
|  |  |  | 323 |
|  |  | 323 |  |
|  | 11000010 |  |  |
| 323 |  |  |  |
| 414 |  |  |  |
|  |  | 414 |  |
|  | 10011001 |  |  |
|  |  |  | 414 |
|  |  |  | 706 |
|  |  | 706 |  |
| 706 |  |  |  |
|  | 100010 |  |  |
|  |  | 918 |  |
|  | 10000001 |  |  |
|  | 100110 |  |  |
|  | 11000111 |  |  |
|  | 10001101 |  |  |
|  | 10010010 |  |  |

Challenge Questions

Perform the operation specified with the binary numbers

10010 1011101 10011

+ 1100 - 1000000 + 1111101

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10011001 11000011 1100101

x 100111 x 101111 - 1001100

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