**Task 1: Convert these denary numbers to binary:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Denary Number* | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | *Binary Number* |
| 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 101 |
| 3 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |
| 17 |  |  |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |  |  |
| 42 |  |  |  |  |  |  |  |  |  |
| 47 |  |  |  |  |  |  |  |  |  |
| 71 |  |  |  |  |  |  |  |  |  |
| 146 |  |  |  |  |  |  |  |  |  |
| 255 |  |  |  |  |  |  |  |  |  |

**Task 2: Work with a friend, give them a number under 255 and see if they can convert it into binary.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Denary Number* | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | *Binary Number* |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

**Task 3: Convert these binary numbers into denary**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Denary Number* | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | *Binary Number* |
| 24 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 00011000 |
|  |  |  |  |  |  |  |  |  | 00000101 |
|  |  |  |  |  |  |  |  |  | 00010110 |
|  |  |  |  |  |  |  |  |  | 01101011 |
|  |  |  |  |  |  |  |  |  | 01111000 |
|  |  |  |  |  |  |  |  |  | 10100100 |
|  |  |  |  |  |  |  |  |  | 10100101 |
|  |  |  |  |  |  |  |  |  | 10111100 |
|  |  |  |  |  |  |  |  |  | 11010111 |
|  |  |  |  |  |  |  |  |  | 11100110 |
|  |  |  |  |  |  |  |  |  | 11111010 |