

The formulae apply to the bits colored with blue and red. In case of negative integers, all the bits in the preceding columns have to be added to the results of the formulae.

Example with 8-bit non-negative integers:

```
0 => 0000 0000
1 => 0000 0001
2 => 0000 0010
3 => 0000 0011
4 => 0000 0100
5 => 0000 0101
6 => 0000 0110
7 => 0000 0111
8 => 0000 1000
9 => 0000 1001
10 => 0000 1010
```

Example with 8-bit negative integers:

```
- 1 => 1111 1111
- 2 => 1111 1110
- 3 => 1111 1101
- 4 => 1111 1100
- 5 => 1111 1011
- 6 => 1111 1010
- 7 => 1111 1001
- 8 => 1111 1000
- 9 => 1111 0111
- 10 => 1111 0110
```