

512	256	128	64	32	16	8	4	2	1
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Number Conversion Exercises

1. Decimal to Binary

• 1 = 0001

8	4	2	1
0	0	0	1

• 42 = 0010 1010

128	64	32	16	8	4	2	1
0	0	1	0	1	0	1	0

• 256 = 0001 0000 0000

256	128	64	32	16	8	4	2	1
1	0	0	0	0	0	0	0	0

• 4,294,967,296

= 0001 0000 0000 0000 0000 0000 0000 0000 0000

2. Binary to Decimal

• 1000 0000 = 128

128	64	32	16	8	4	2	1
1	0	0	0	0	0	0	0

• 1010 1010 = 170

	256	128	64	32	16	8	4	2	1
		1	0	1	0	1	0	1	0

• 1111 0000 = 240

128	64	32	16	8	4	2	1
1	1	1	1	0	0	0	0

• 1100 1100 = 204

128	64	32	16	8	4	2	1
1	1	0	0	1	1	0	0

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