

Converting decimal to binary and vice versa

Convert the following decimal numbers to binary numbers:

35:	2^6	2^5	2^4	2^3	2^2	2^1	2^0
	64	32	16	8	4	2	1

80:							
-----	--	--	--	--	--	--	--

99:							
-----	--	--	--	--	--	--	--

190:							
------	--	--	--	--	--	--	--

Convert the following binary numbers to decimal numbers:

0	0	1	1	0	0	1
---	---	---	---	---	---	---

=

1	1	0	1	1	0	0
---	---	---	---	---	---	---

=

1	1	0	1	1	1	0
---	---	---	---	---	---	---

=

1	1	0	0	1	1	1
---	---	---	---	---	---	---

=

1	0	1	1	1	1	0
---	---	---	---	---	---	---

=

The formula for finding the highest number that can be stored in given bits is $2^N - 1$.

What is the largest number that can be stored in 4 bits?