

Converting decimal to binary and vice versa

Convert the following decimal numbers to binary numbers:

Base	2^6	2^5	2^4	2^3	2^2	2^1	2^0
Value	64	32	16	8	4	2	1
13 =							
25 =							
89 =							
183 =							

Convert the following binary numbers to decimal numbers:

0	0	1	1	0	1	1	=
---	---	---	---	---	---	---	---

1	1	0	1	1	0	0	=
---	---	---	---	---	---	---	---

1	1	0	1	1	1	0	=
---	---	---	---	---	---	---	---

1	1	0	1	0	1	1	=
---	---	---	---	---	---	---	---

1	1	1	1	1	0	1	=
---	---	---	---	---	---	---	---

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 6 bits?