## **Numeral Systems**

DECIMAL	ten millions	millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
	10 7	10 6	10 5	10 4	10 3	10 2	10 1	10 0
						4	2	0

BINARY	one twenty eights	sixty fours	thirty twos	sixteens	eights	fours	twos	ones
	2 7	2 6	2 5	2 4	2 3	2 2	2 1	2 0
	0	0	0	0	1	0	1	0

HEXADECIMAL		65,536's	4,096's	256's	16's	ones

16 <sup>7</sup>	16 <sup>6</sup>	16 <sup>5</sup>	16 4	16 <sup>3</sup>	16 <sup>2</sup>	16 1	16 0
					3	8	f

## 0,1,2,3,4,5,6,7,8,9,a,b,c,d,e,f

base64					262,144's	4096's	64's	ones
	64 7	64 6	64 5	64 4	64 3	64 2	64 1	64 0

BINARY	128's	sixty fours	thirty twos	sixteens	eights	fours	twos	ones
	2 7	2 6	2 5	2 4	2 3	2 2	2 1	2 0
	0	0	0	0	0	0	0	0

BINARY		1,048,576's	 2048's	1024's	512's	256's
		2 20	 2 11	2 10	2 9	2 8
				1	0	0