

Mask			#sub	host	TCP/IP Masking worksheet															
binary	hex	dec	Nets	/ Net	Network							Broadcast								
11111100	FC	252	64	2	0	4	8	...	...	244	248	252	3	7	11	...	...	247	251	255
11111000	F8	248	32	6	0	8	16	...	...	232	240	248	7	15	23	...	...	239	247	255
11110000	F0	240	16	14	0	16	32	...	...	208	224	240	15	31	47	...	...	223	239	255
11100000	E0	224	8	30	0	32	64	96	128	160	192	224	31	63	95	127	159	191	223	255
11000000	C0	192	4	62	0	64	128	192				63	127	191	255					
10000000	80	128	2	126	0	128						127	255							
00000000	0	0	1	254	0						255									

IPmask.xls Prepared by Tim@Musson.net

Port Name	Service Description
7	echo Echo
13	daytime Daytime
15	netstat Who is up or netstat
17	quote Quote of the day
20	ftp-data File Transfer Protocol (Data)
21	ftp File Transfer Protocol
23	telnet Terminal Connection
25	smtp Simple Mail Transport Protocol
37	time Time
39	rlp Resource Location Protocol
42	nameserver Host Name Server
43	nicname Who is ...
53	domain Domain Name Server
67	bootps Bootstrap Proto. Server
68	bootpc Bootstrap Proto. Client
69	tftp Trivial File Transfer Protocol
79	finger Finger
101	hostnames NIC Host Name Server
117	uucp-path UUCP Path Service
123	ntp Network Time Protocol
161	snmp Simple Network Mgmt Protocol
520	rip Routing Information Protocol

http://www.optimized.com/tech_cmp

	1st Octet	first bit(s)	Networks	Nodes/Net	Private Addrs
Class A	0 - 127	0	256	256*256*256	10.x.x.x
Class B	128 - 191	10	256*256	256*256	176.16-31.x.x
Class C	192 - 223	110	256*256*256	256	192.168.x.x

Bits	255	0	0	0	
8	255	0	0	0	
16	255	255	0	0	
17	255	255	128	0	
18	255	255	192	0	
19	255	255	224	0	
20	255	255	240	0	
21	255	255	248	0	
22	255	255	252	0	
23	255	255	254	0	
24	255	255	255	0	
25	255	255	255	128	1000 0000
26	255	255	255	192	1100 0000
27	255	255	255	224	1110 0000
28	255	255	255	240	1111 0000
29	255	255	255	248	1111 1000
30	255	255	255	252	1111 1100
31	255	255	255	254	1111 1110

IPX sap	Description	other good info;
4	File Server	ftp.isi.edu/in-notes/iana/assignments/novell-sap-numbers
107	RConsole	www.cavebear.com/CaveBear/Ethernet
278	NDS	www.host.ots.utexas.edu/ethernet/
23f	Various Servers	standards.ieee.org/regauth/oui/
26b	Time Sync	www.isi.edu/publications.html
30c	HP JetDirect	www.isi.edu

0	32	64	96	128	160	192	224
1	33	65	97	129	161	193	225
2	34	66	98	130	162	194	226
3	35	67	99	131	163	195	227
4	36	68	100	132	164	196	228
5	37	69	101	133	165	197	229
6	38	70	102	134	166	198	230
7	39	71	103	135	167	199	231
8	40	72	104	136	168	200	232
9	41	73	105	137	169	201	233
10	42	74	106	138	170	202	234
11	43	75	107	139	171	203	235
12	44	76	108	140	172	204	236
13	45	77	109	141	173	205	237
14	46	78	110	142	174	206	238
15	47	79	111	143	175	207	239
16	48	80	112	144	176	208	240
17	49	81	113	145	177	209	241
18	50	82	114	146	178	210	242
19	51	83	115	147	179	211	243
20	52	84	116	148	180	212	244
21	53	85	117	149	181	213	245
22	54	86	118	150	182	214	246
23	55	87	119	151	183	215	247
24	56	88	120	152	184	216	248
25	57	89	121	153	185	217	249
26	58	90	122	154	186	218	250
27	59	91	123	155	187	219	251
28	60	92	124	156	188	220	252
29	61	93	125	157	189	221	253
30	62	94	126	158	190	222	254
31	63	95	127	159	191	223	255