```
user@singularity:~$ sudo apt install ipcalc
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  ipcalc
0 upgraded, 1 newly installed, 0 to remove and 12 not upgraded.
Need to get 25,4 kB of archives.
After this operation, 73,7 kB of additional disk space will be used.
Get:1 http://es.ports.ubuntu.com/ubuntu-ports jammy/universe arm64 ipcalc all 0.42-2 [25,4 kB]
Fetched 25,4 kB in 0s (143 kB/s)
Selecting previously unselected package ipcalc.
(Reading database ... 172150 files and directories currently installed.)
Preparing to unpack .../archives/ipcalc_0.42-2_all.deb ...
Unpacking ipcalc (0.42-2) ...
Setting up ipcalc (0.42-2) ...
Processing triggers for man-db (2.10.2-1) ...
```

```
2^n - 2 >= 30
2³ - 2 = 30

192.168.1.0/24

/24 11111111.11111111.11111111.00000000
/27 11111111.11111111.11111111.11100000
255.255.255.224

/27
2³ = 8
```

```
/27

192.168.1.0
192.168.1.1
192.168.1.30
192.168.1.31
```

```
user@singularity:~$ ipcalc 192.168.1.0/24 -s 30
Address:   192.168.1.0          11000000.10101000.00000001. 00000000
Netmask:   255.255.255.0 = 24   11111111.11111111.11111111. 00000000
Wildcard:  0.0.0.255            00000000.00000000.00000000. 11111111
=>
Network:   192.168.1.0/24       11000000.10101000.00000001. 00000000
HostMin:   192.168.1.1          11000000.10101000.00000001. 00000001
HostMax:   192.168.1.254        11000000.10101000.00000001. 11111110
Broadcast: 192.168.1.255        11000000.10101000.00000001. 11111111
Hosts/Net: 254                   Class C, Private Internet

1. Requested size: 30 hosts
Netmask:   255.255.255.224 = 27 11111111.11111111.11111111.111 00000
Network:   192.168.1.0/27       11000000.10101000.00000001.000 00000
HostMin:   192.168.1.1          11000000.10101000.00000001.000 00001
HostMax:   192.168.1.30         11000000.10101000.00000001.000 11110
Broadcast: 192.168.1.31         11000000.10101000.00000001.000 11111
Hosts/Net: 30                    Class C, Private Internet

Needed size:  32 addresses.
Used network: 192.168.1.0/26.9999999999999999999999999999999999999
Unused:
192.168.1.32/27
192.168.1.64/26
192.168.1.128/25
user@singularity:~$
```