1) /16 - 65,536
2) /17 - 32,768
3) /18 - 16,384
4) /19 - 8192
5) /20 - 4096
6) /21 - 2048
7) /22 - 1024
8) /23 - 512
9) /24 - 256
10) /25 - 128
11) /26 - 64
12) /27 - 32
13) /28 - 16

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example 1: VPC 1 - 10.0.0.0/24 - 256 IP Addresses

Total number of bits in IPV4 - 32

Bits in CIDR IP address - 24

$32 - 24 = 8$, $2^8 = 256$ IP addresses

10.0.0.0, 10.0.0.1 - , 10.0.0.2 ..... 10.0.0.255

example 2: VPC 2 - 10.0.0.0/23 - 512 IP Addresses

Total number of bits in IPV4 - 32

Bits in CIDR IP address - 23

$\frac{512}{256} = 2$

$32 - 23 = 9$, $2^9 = 512$ IP addresses

10.0.0.0, 10.0.0.1, 10.0.0.2 ..... 10.0.0.255,

10.0.1.0, 10.0.1.1, 10.0.1.2 ..... 10.0.1.255

example 3: VPC3 - 10.0.0.0/22 - 1024 IP Addresses

Total number of bits in IPV4 = 32

Bits in CIDR IP address - 22

$32 - 22 = 10 \Rightarrow 2^{10} = 1024$ IP addresses

10.0.0.0, 10.0.0.1, 10.0.0.2 ..... 10.0.0.255,

10.0.1.0, 10.0.1.1, 10.0.1.2 ..... 10.0.1.255,

10.0.2.0, 10.0.2.1, 10.0.2.2 ..... 10.0.2.255,

10.0.3.0, 10.0.3.1, 10.0.3.2 ..... 10.0.3.255

example 4: VPC 4 - 10.0.0.0/24 - 256 IP Addresses

Total number of bits in IPV4 - 32

Bits in CIDR IP address - 24

32 - 24 = 8 $\Rightarrow 2^8$ = 256 IP addresses

10.0.0.0, 10.0.0.1, ... 10.0.0.255

example 5: VPC 5 - 10.0.0.0/25 - 128 IP addresses

Total number of bits in IPV4 = 32

Bits in CIDR IP address - 25

32 - 25 = 7 $\Rightarrow 2^7$ = 128

10.0.0.0, 10.0.0.1, 10.0.0.2 ..... 10.0.0.127

example 6: VPC 6 - 10.0.0.0/26 - 64 IP addresses

Total number of bits in IPV4 = 32

Bits in CIDR IP address - 26

32 - 26 = 6 $\Rightarrow 2^6 \Rightarrow 64$

10.0.0.0, 10.0.0.1, ... 10.0.0.63

example 7: VPC 7 - 10.0.0.0/27 - 32 IP addresses

Total number of bits in IPV4 = 32

Bits in CIDR IP address = 27

32 - 27 = 5 $\Rightarrow 2^5 = 32$

10.0.0.0, 10.0.0.1, ... 10.0.0.31

example 8: VPC 8 - 10.0.0.0/28 - 16 IP addresses

Total number of bits in IPV4 = 32

Bits in CIDR IP address = 28

$32 - 28 = 4 \rightarrow 2^4 = 16$

10.0.0.0, 10.0.0.1, ... 10.0.0.15

example 9: VPC 9 - 10.0.0.0/21 - 2048

10.0.0.0, 10.0.0.1 . . . . . 10.0.0.255

10.0.1.0 . . . . . 10.0.1.255

10.0.2.0 . . . . . 10.0.2.255

10.0.3.0 . . . . . 10.0.3.255

10.0.4.0 . . . . . 10.0.4.255

10.0.5.0 . . . . . 10.0.5.255

10.0.6.0 . . . . . 10.0.6.255

10.0.7.0 . . . . . 10.0.7.255

example 10: VPC 10 - 10.0.0.0/20 - ~~1024~~ 4096

10.0.0.0 . . . . . 10.0.0.255

10.0.1.0 . . . . . 10.0.1.255

:

10.0.15.0 . . . . . 10.0.15.255

example 11: VPC 11 - 10.0.0.0/19 - 8192

10.0.0.0 . . . . . 10.0.0.255

10.0.1.0 . . . . . 10.0.1.255

:

10.0.31.0 . . . . . 10.0.31.255

example 12: VPC 12 - 10.0.0.0/18 - 16,384

10.0.0.0 . . . . . 10.0.0.255
10.0.1.0 10.0.1.255
⋮ ⋮
10.0.63.0 . . . . 10.0.63.255

example 13: VPC 13 - 10.0.0.0/17 - 32,768

10.0.0.0 - - - - 10.0.0.255
10.0.1.0 . . . . 10.0.1.255
⋮ ⋮
10.0.127.0 . . . . 10.0.127.255

example 14: VPC 14 - 10.0.0.0/16 - 65536

10.0.0.0 . . . . 10.0.0.255
10.0.1.0 . . . . 10.0.1.255
⋮ ⋮
10.0.255.0 . . . . . 10.0.255.255

1) VPC 2 - 20.15.0.0/23 - 512 IP Addresses

20.15.0.0 to 20.15.1.255

2) VPC 3 - 20.15.0.0/24 - 256 IP addresses

20.15.0.0 to 20.15.0.255

3) VPC 4 - 20.15.0.0/25 - 128 IP addresses

20.15.0.0 to 20.15.0.127

4) VPC 5 - 20.15.0.0/26 - 64 IP addresses

20.15.0.0 to 20.15.0.63

5) VPC 6 - 20.15.0.0/27 - 32 IP addresses

20.15.0.0 to 20.15.0.31

6) VPC 7 - 20.15.0.0/28 - 16 IP addresses

20.15.0.0 to 20.15.0.15

7) VPC 8 - 20.15.0.0/22 - 1024 IP addresses

20.15.0.0 to 20.15.3.255

8) VPC 9 - 20.15.0.0/21 - 2048 IP addresses

20.15.0.0 to 20.15.7.255

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9) VPC 10 - 20.15.0.0/20 - 4096 IP addresses

20.15.0.0 to 20.15.15.255

10) VPC 11 - 20.15.0.0/19 - 8192 IP addresses

20.15.0.0 to 20.15.31.255

11) VPC 12 - 20.15.0.0/18 - 16384 IP addresses

20.15.0.0 to 20.0.63.255

12) VPC 13 - 20.15.0.0/17 - 32768 IP addresses

20.15.0.0 to 20.0.127.255

13) VPC 14 - 20.15.0.0/16 - 65536 IP addresses

20.15.0.0 to 20.0.255.255

Example 1: VPC1 - 20.15.0.0/22 -

subnet 1 - 256 IP's - 20.15.0.0/24

subnet 2 - 256 IP's - 20.15.1.0/24

subnet 3 - 256 IP's - 20.15.2.0/24

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subnet 4 - 256 IP's - 20.15.3.0/24

Example 2: VPC 2 - 20.15.0.0/21 -

Subnet 1 - 512 IP's - 20.15.0.0/23

Subnet 2 - 512 IP's - 20.15.2.0/23

Subnet 3 - 512 IP's - 20.15.4.0/23

Subnet 4 - 512 IP's - 20.15.6.0/23

Example 3: VPC 3 - 20.15.0.0 /20 -

Subnet 1 - 1024 IP's - 20.15.0.0 /22

Subnet 2 - 1024 IP's - 20.15.4.0 /22

Subnet 3 - 1024 IP's - 20.15.8.0/22

Subnet 4 - 1024 IP's - 20.15.12.0/22

Example 4: VPC 4 - 20.15.0.0/19 -

Subnet 1 - 2048 IP's - 20.15.0.0/21

Subnet 2 - 2048 IP's - 20.15.8.0/21

Subnet 3 - 2048 IP's - 20.15.16.0/21

Subnet 4 - 2048 IP's - 20.15.24.0/21

Example 5: VPC 5 - 20.15.0.0/18 -

Subnet 1 - 4096 IP's - 20.15.0.0/20

Subnet 2 - 4096 IP's - 20.15.16.0/20

Subnet 3 - 4096 IP's - 20.15.32.0/20

Subnet 4 - 4096 IP's - 20.15.48.0/20

Example 6: VPC 6 - 20.15.0.0/17 -

Subnet 1 - 8192 IP's - 20.15.0.0/19

Subnet 2 - 8192 IP's - 20.15.32.0/19

Subnet 3 - 8192 IP's - 20.15.64.0/19

Subnet 4 - 8192 IP's - 20.15.96.0/19

Example 7: VPC 7 - 20.15.0.0/16 -

subnet 1 - 16384 - IP's - 20.15.0.0/18

subnet2 - 16384 IP's - 20.15.64.0/18

subnet 3 - 16384 IP's - 20.15.128.0/18

subnet4 - 16384 IP's - 20.15.192.0/18

Example 8: VPC 8 - 20.15.0.0/18 -

subnet 1 - 4096 - 20.15.0.0/20

subnet2 - 2048 - 20.15.16.0/21

Subnet 3 - 1024 - 20.15.24.0/22

Subnet 4 - 2048 - 20.15.32.0/21

Subnet 5 - 1024 - 20.15.44.0/22

Subnet 6 - 2048 - 20.15.48.0/21

Subnet 7 - 4096 - 20.15.56.0/20

16384 - 64

Example 9: VPC 9 - 20.15.0.0/16 -

subnet 1 - 4096 IP's - 20.15.0.0/20

subnet 2 - 16384 IP's - 20.15.16.0/18

Subnet 3 - 4096 IP's - 20.15.80.0/20

Subnet 4 - 2048 IP's - 20.15.96.0/21

Subnet 5 - 1024 IP's - 20.15.104.0/22

Subnet 6 - 8192 IP's - 20.15.108.0/19

Subnet 7 - 4096 IP's - 20.15.32.0/20

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Example 10: VPC 10 - 20.15.0.0/18 -

Subnet 1 - 2048 IP's - 20.15.0.0/21

Subnet 2 - 4096 IP's - 20.15.8.0/20

Subnet 3 - 512 IP's - 20.15.24.0/23

Subnet 4 - 1024 IP's - 20.15.26.0/22

Subnet 5 - 512 IP's - 20.15.30.0/23

Subnet 6 - 4096 IP's - 20.15.32.0/20

Subnet 7 - 1024 IP's - 20.15.48.0/22

Subnet 8 - 2048 IP's - 20.15.52.0/21

Example 11: VPC 10 - 20.15.0.0/17 -

subnet 1 - 2048 IP's - 20.15.0.0/21

subnet 2 - 8192 IP's - 20.15.8.0/19

subnet 3 - 2048 IP's - 20.15.40.0/21

subnet 4 - 1024 IP's - 20.15.48.0/22

subnet 5 - 512 IP's - 20.15.52.0/23

subnet 6 - 4096 IP's - 20.15.54.0/20

subnet 7 - 512 IP's - 20.15.70.0/23

subnet 8 - 2048 IP's - 20.15.72.0/21

~~Example 12 VPC 10.0.0.0/16~~

~~Subnet 1 - 4096 IP's - 10.0.0.0/20~~

~~Subnet 2 - 1024 IP's - 10.0.16.0/22~~

~~Subnet 3 - 4096 IP's - 10.0.20.0/19~~

~~Subnet 4 - 4096 IP's - 10.0.36.0/19~~

~~Subnet 5 - 2048 IP's - 10.0.52.0/~~

~~Subnet 6 - 8192 IP's - 10.0.76.0/20~~

Example 12: VPC 12 - 10.0.0.0/16

Subnet 1 - 4096 IP's - 10.0.0.0/20

Subnet 2 - 1024 IP's - 10.0.16.0/22

Subnet 3 - 8192 IP's - 10.0.20.0/19

subnet 4 - 4096 IP's - 10.0.52.0/20

subnet 5 - 2048 IP's - 10.0.68.0/21

subnet 6 - 4096 IP's - 10.0.76.0/20