

PLANTEL: UNIVERSIDAD ISRAEL

ASIGNATURA

REDES DATOS 1

ALUMNO: MARCO ANTONIO AYALA LITUMIA

FECHA:

DÍA

MES

AÑO

CURSO: SEPTIMO A

CALIFICACIÓN

TRIMESTRE: MOMENTO 2

FIRMA PROFESOR

SEMANA 2

Resolver los siguientes ejercicios:

Calcular el número de host de la siguientes direcciones de red.

1. 192.0.0.0 Mascara/8

Numero Host: 16 777 214

```

11111111.00000000.00000000.00000000
255. 0 . 0 . 0

```

Red: 192.0.0.0

1er Host: 192.0.0.1

Ultimo Host: 192.255.255.254

Broadcast: 192.255.255.255

```

11000000.00000000.00000000.00000000
00000000.11111111.11111111.11111111
11000000.11111111.11111111.11111111
192. 255. 255. 255

```

2. 192.0.0.0 Mascara/10

Numero Host: 4194304

```

11111111.11000000.00000000.00000000
255. 192. 0 . 0

```

Red: 192.0.0.0

1er Host: 192.0.0.1

Ultimo Host: 192.63.255.254

Broadcast: 192.63.255.255

```

11000000.00000000.00000000.00000000
00000000.00111111.11111111.11111111
11000000.00111111.11111111.11111111
192. 63. 255. 255

```

3. 192.0.0.0 Mascara/12

Numero Host: 1048576

```

11111111.11110000.00000000.00000000
255. 240. 0 . 0

```

Red: 192.0.0.0

1er Host: 192.0.0.1

Ultimo Host: 192.15.255.254

Broadcast: 192.15.255.255

```

11000000.00000000.00000000.00000000
00000000.00001111.11111111.11111111
11000000.00001111.11111111.11111111
192. 255. 255. 255

```

4. 192.0.0.0 Mascara/14

Numero Host: 262144

```

11111111.11110000.00000000.00000000

```

Red: 192.0.0.0

1er Host: 192.0.0.1

Ultimo Host: 192.3.255.254

Broadcast: 192.3.255.255

```

11000000.00000000.00000000.00000000
00000000.00001111.11111111.11111111
11000000.00001111.11111111.11111111
192. 3. 255. 255

```


5. 192.0.0.0/16

11 11 11 11 11 11 11 11 00 00 00 00 00 00 00 00
255 255 0 0

Numero Host: 65536

Real	192.	0.	0.	0
1st Host	192.	0.	0.	1
Ultimate Host	192.	0.	255.	254
Broadcast	192.	0.	255.	255

11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 11 11 11 11 11 11 11 11
11 00 00 00 00 00 00 00 11 11 11 11 11 11 11 11
192 0 255 255

6. 192. 0. 0. 0 / 18

255 255 192 ①

Numero Host : 16382

Rad: 192. 0. 0. 0
 1st Host 192. 0. 0. 1
 Virtual Host 192. 0. 63. 254
 Broadcast 192. 0. 63. 255

11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 11 11 11 11 11 11 11
11 00 00 00 00 00 00 00 00 11 11 11 11 11 11 11
192 , 0 , 63 , 255

7. 192. 0. 0. 0 / 20

Dead 192. 0. 0. 0
 Ter Host 192. 0. 0. 1
 Ultimate Host 192. 0. 15. 254
 Broadcast 192. 0. 15. 255
 Hosts: 4096

11 11 11 11 11 11 11 11 11 00 00 00 00 00 00
255 . 255 240 . 0

11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 11 11 11 11 11 11
11 00 00 00 00 00 00 00 11 11 11 11 11 11
192 0 15 255

8. 192. 0. 0. 0 / 22

Red 192. 0. 0. 0
1st Host: 192. 0. 0. 1
Ultimo Host: 192. 0. 3. 254
Broadcast 192. 0. 3. 255
Host: 1024

$10\ 00\ 00\ 00\ 00\ 00\ 00\ 11\ 1\ 11\ 11\ 00\ 00\ 00\ 00\ 00$
 $255\ 255\ 252\ 0$

$11\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00$
 $00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 11\ 11\ 11\ 11\ 11$
 $11\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 11\ 11\ 11\ 11\ 11$
 $192\ 0\ 3\ 255$

9. 192. 0. 0. 0/24

Dead 192. 0. 0. 0.
1st Host 192. 0. 0. 1
ultimo Host 192. 0. 0. 254
Broadcast 192. 0. 0. 255
Host : 254

11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 11 11 11 11
11 00 00 00 00 00 00 00 00 00 00 00 11 11 11 11
192 . 0 . 0 255
11 11 11 11 11 11 11 11 11 11 00 00 00 00
255 255 255 0

10. 192.0.0.0/26

Red 192.0.0.0
1st Host 192.0.0.1
Ultimo Host 192.0.0.62
Broadcast 192.0.0.63
Hosts 64

11 11 11 11 11 11 11 11 11 11 11 11 11 11 0000 00
255 255 255 192

11 0000 00 0000 00 0000 00 00 00 00 00 00 00 00 00
00 0000 00 00 00 00 00 00 00 00 00 00 00 00 11 11 11 11 11
11 0000 00 0000 00 0000 00 00 00 00 00 00 11 11 11 11
192 . 0 . 0 . 63

11. 192.0.0.0/27

Red 192.0.0.0
1st Host 192.0.0.1
Ultimo Host 192.0.0.30
Broadcast 192.0.0.31
Hosts 32

11 11 11 11 11 11 11 11 11 11 11 11 11 11 00 00
255 255 255 240

11 0000 0000 00 0000 00 0000 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 11 11
11 00 00 00 0000 00 00 00 00 00 00 00 00 00 11 11
192 . 0 . 0 . 31

12. 192.0.0.0/28

Red 192.0.0.0
1st Host 192.0.0.1
Ultimo Host 192.0.0.14
Broadcast 192.0.0.15
Hosts 16

11 11 11 11 11 11 11 11 11 11 11 11 11 11 00
255 . 255 . 255 . 252

11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 11
11 00 00 00 00 00 00 00 00 00 00 00 00 00 11
192 . 0 . 0 . 15

13. 192.0.0.0/29

Red 192.0.0.0
1st Host 192.0.0.1
Ultimo Host 192.0.0.7
Hosts : 6
Broadcast 192.0.0.6

11 11 11 11 11 11 11 11 11 11 11 11 11 11 00
255 . 255 . 255 . 248

11 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 11
192 . 0 . 0 . 7