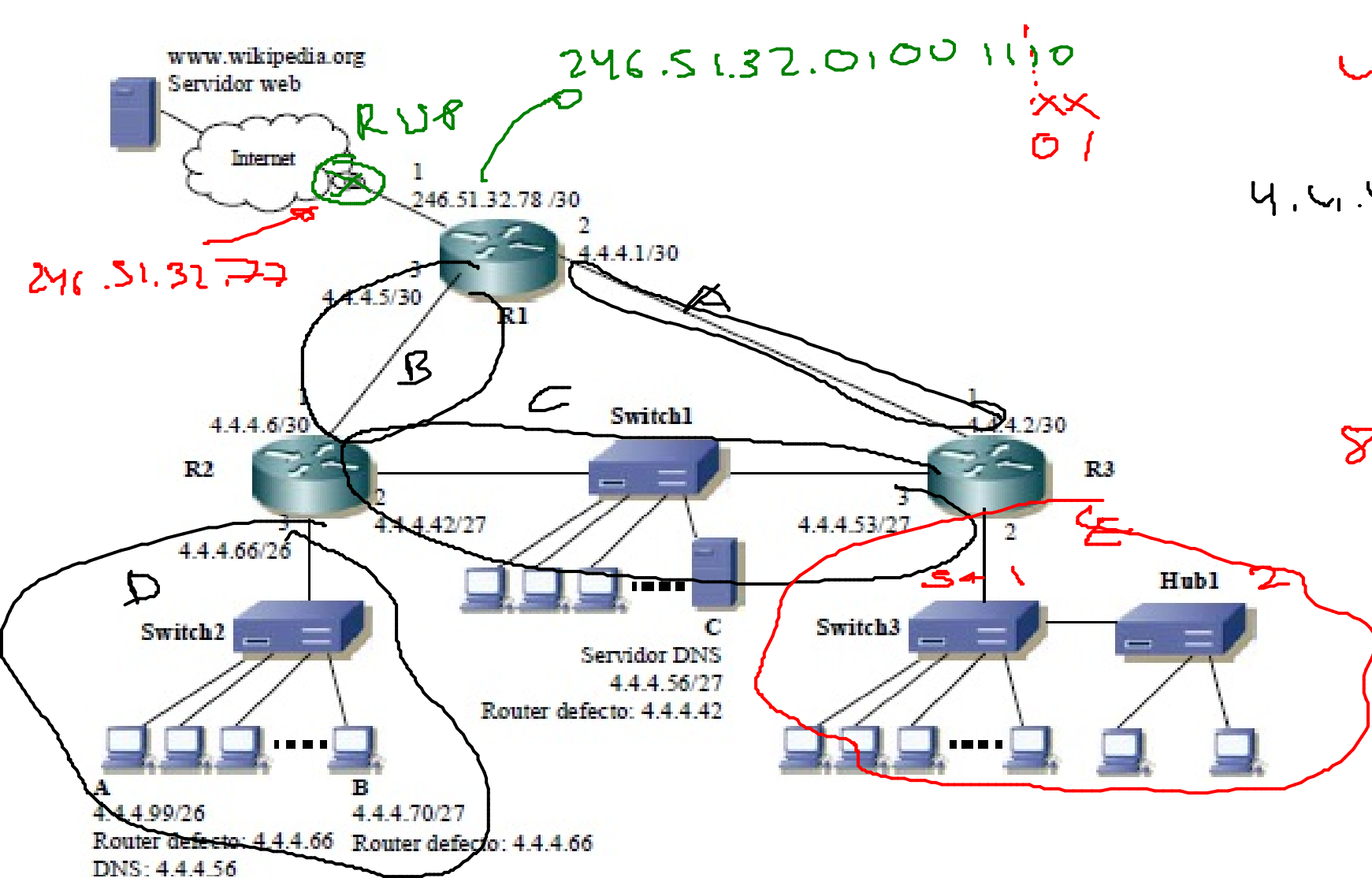




246.51.32.0100 1110
xx
01

4.4.4.0/25

4.4.4.0xxx xxxxx

246.51.32.77

8 IPs $\leq 2^n - 2$
n = 4

A 4.4.4.0/30
B 4.4.4.4/30

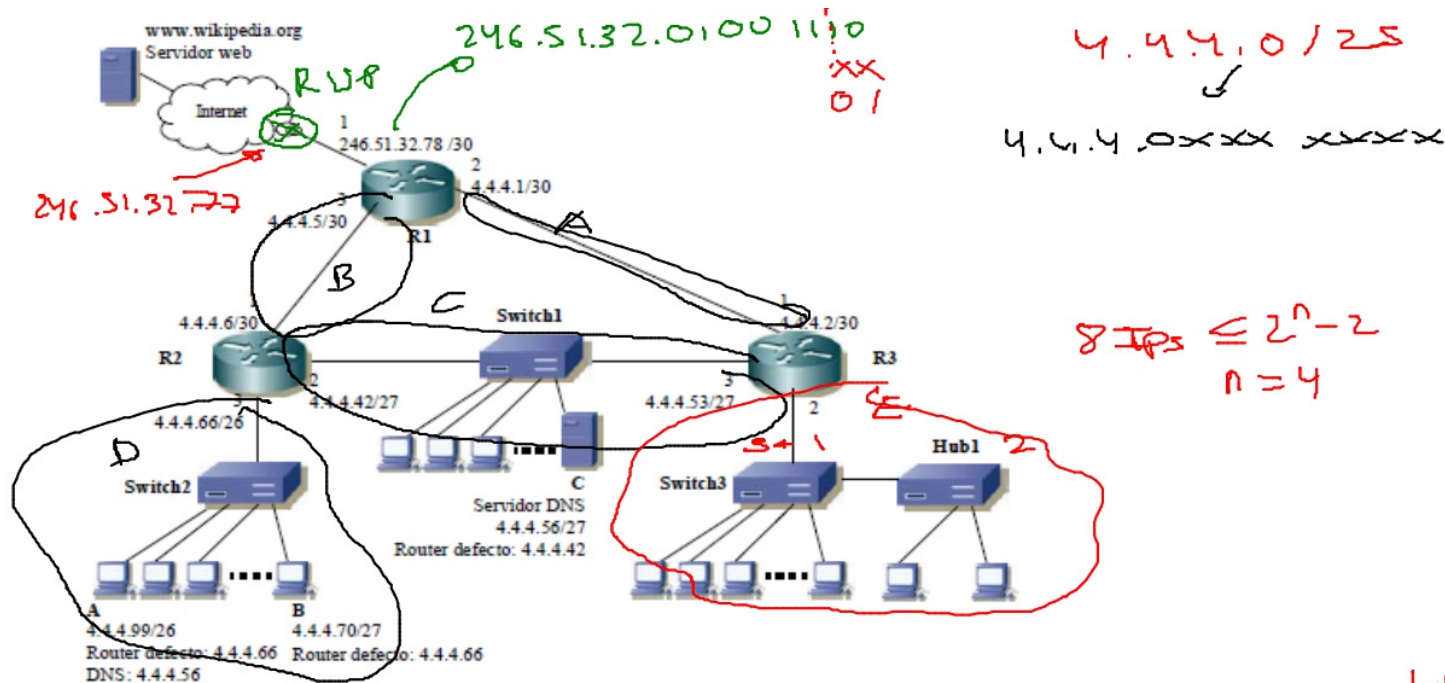
C 4.4.4.32/27
D 4.4.4.64/26

0000	00xx	0-3
0000	01xx	4-7
10xx	11xx	8-11
10xx	11xx	12-15
0001	xxxx	16-31
001x	xxxx	32-63
01xx	xxxx	64-127

4.4.4.8/29

4.4.4.16/28

LIBRES



$$8 \text{ IPs} \leq 2^n - 2$$

$$n = 4$$

A 4.4.4.0/30
B 4.4.4.4/30

C 4.4.4.82/27
D 4.4.4.64/26

LIBRES
4.4.4.8/29
A
1 0 x x 8-11 4 1 x x x
1 1 x x 12-15 4 1 x x x
E 0 0 0 1 x x x x 16-31
0 0 1 x x x x x 32-63
0 1 x x x x x x 64-127

4.4.4.16/27

Router/NH INT

→ A /30 — 2
B — 3
246.51.32.76/30 — 1

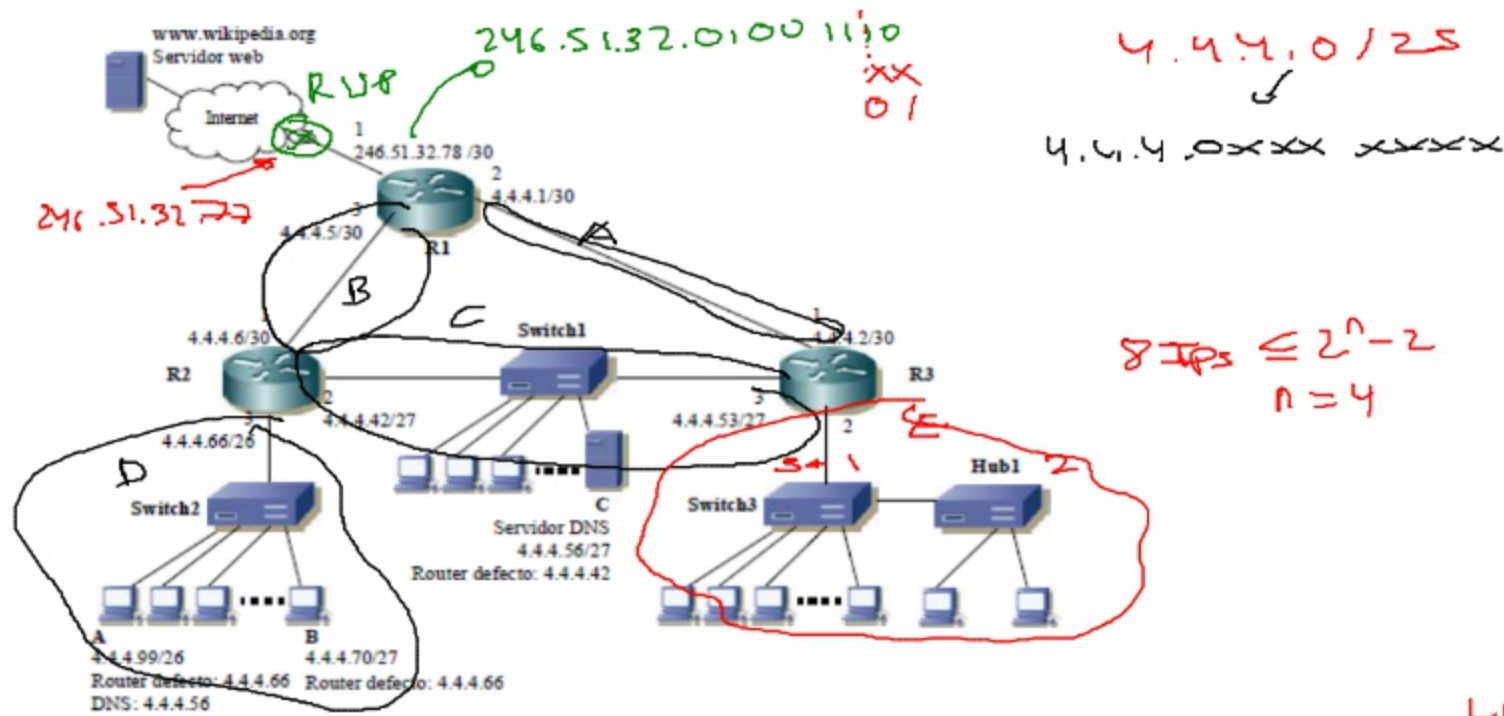
→ 0.0.0.0/0 246.51.32.77 1

C 4.4.4.2 2
D 4.4.4.2 2
E 4.4.4.2 2 (123)

→ 4.4.4.0/25 4.4.4.2 2

4.4.4.2

4.4.4.0/25



$$8 \text{ IPs} \leq 2^n - 2$$

$$n = 4$$

A 4.4.4.0/30
B 4.4.4.4/30

C 4.4.4.82/27
D 4.4.4.64/26

0000 00xx 0-3
0000 01xx 4-7
0000 10xx 8-11
0000 11xx 12-15
0001 xxxxx 16-31
001x xxxxx 32-63
01xx xxxxx 64-127

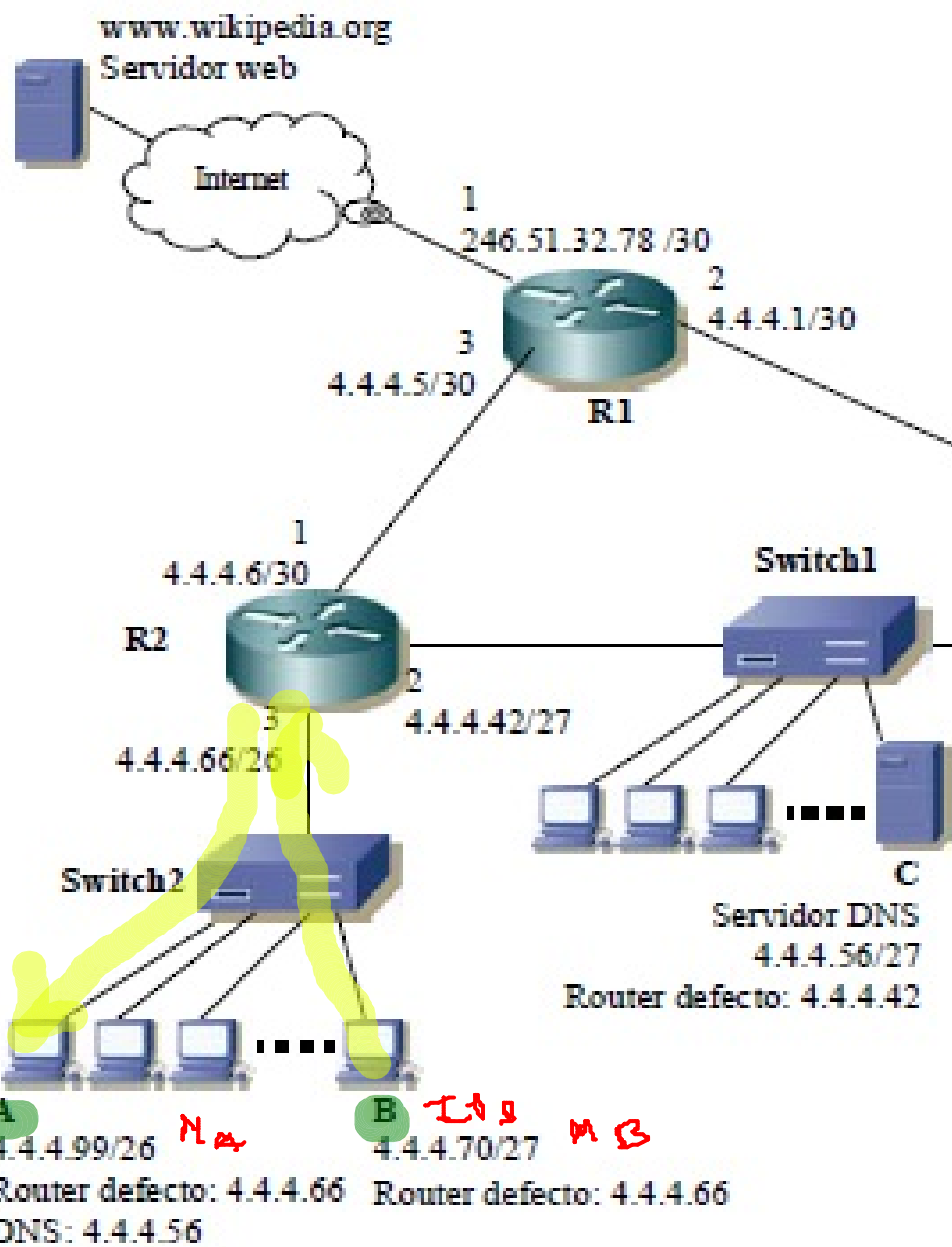
LIBRES
4.4.4.8/29

4.4.4.16/28

Router/Net N H INT

→ A /30 — 2
B — 3
246.51.32.76/30 — 1
→ 0.0.0.0/0 246.51.32.77 1
E 4.4.4.2 2

0.0.4.4.0/25 4.4.4.6 3 (R2, 1)



e) IP A → B
 f) IP B → A
 (A) And IP B
 MA 4.4.4.70 /26

3 4.4.4.70 → 0100010
 01000110
 xx xx xx
 01000000
 4.4.4.64 /26

4.4.4.99 /26
 4.4.4.64

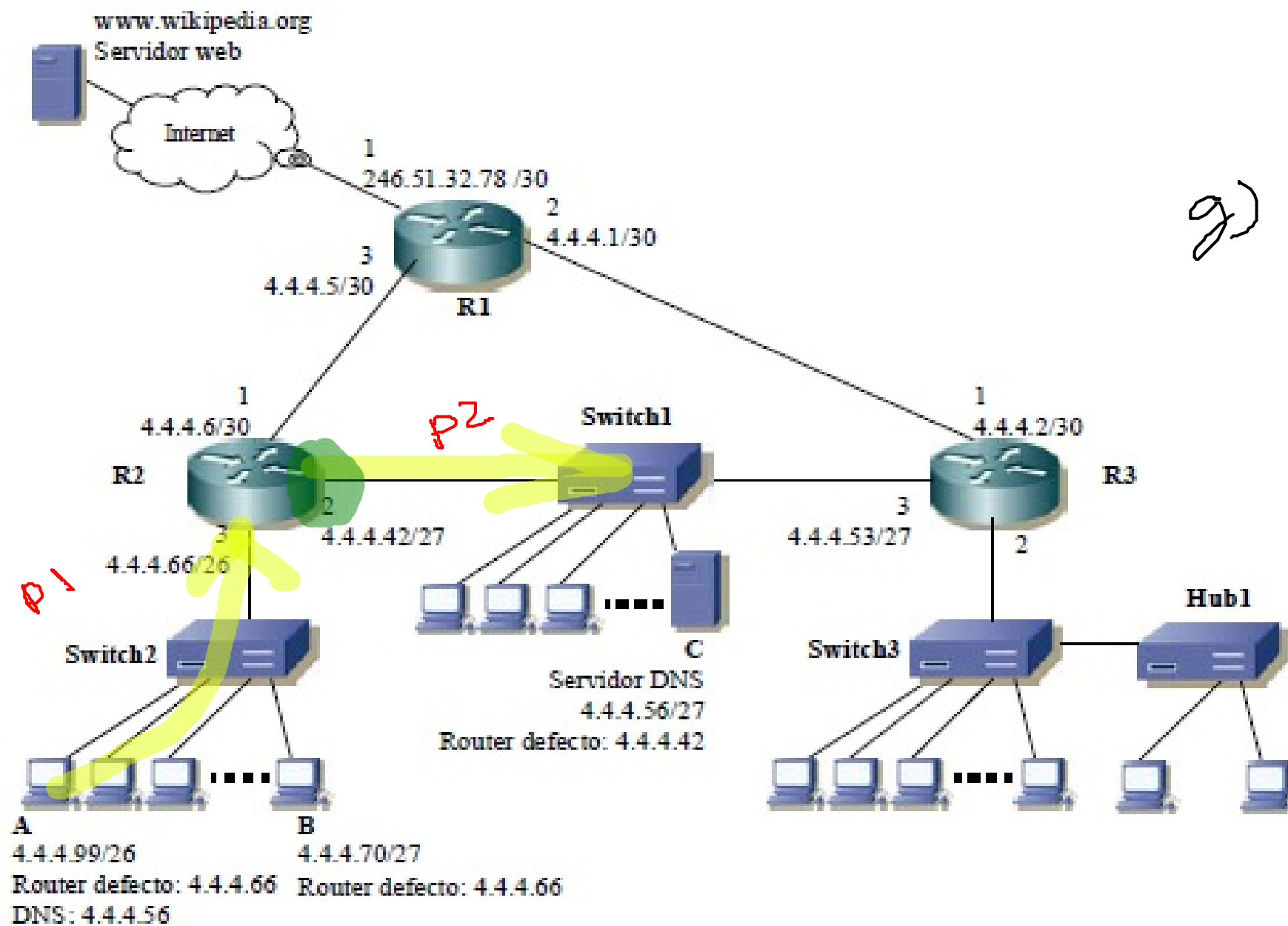
4.4.4.99 /27

Red
 4.4.4.64 /27
 01100011
 x x x x
 4.4.4.96

MAC_A MAC_B IP_A IP_B

e) MAC_A MAC_B IP_A IP_B

f) MAC_B MAC_{R2,3} IP_B IP_A
 MAC_{R2,3} MAC_A " "



g) $IP_A \rightarrow C$

	MAC ₀	MAC _n	IP ₀	IP _n
P1	MAC _A	MAC _{R2,3}	IP _A	IP _C
P2	MAC _{R2,2}	MAC _C	"	"