SUBNETTING MADE EASY

CLASSFUL ADDRESSING
CLASS “C” ADDRESS

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Cisco Netacad

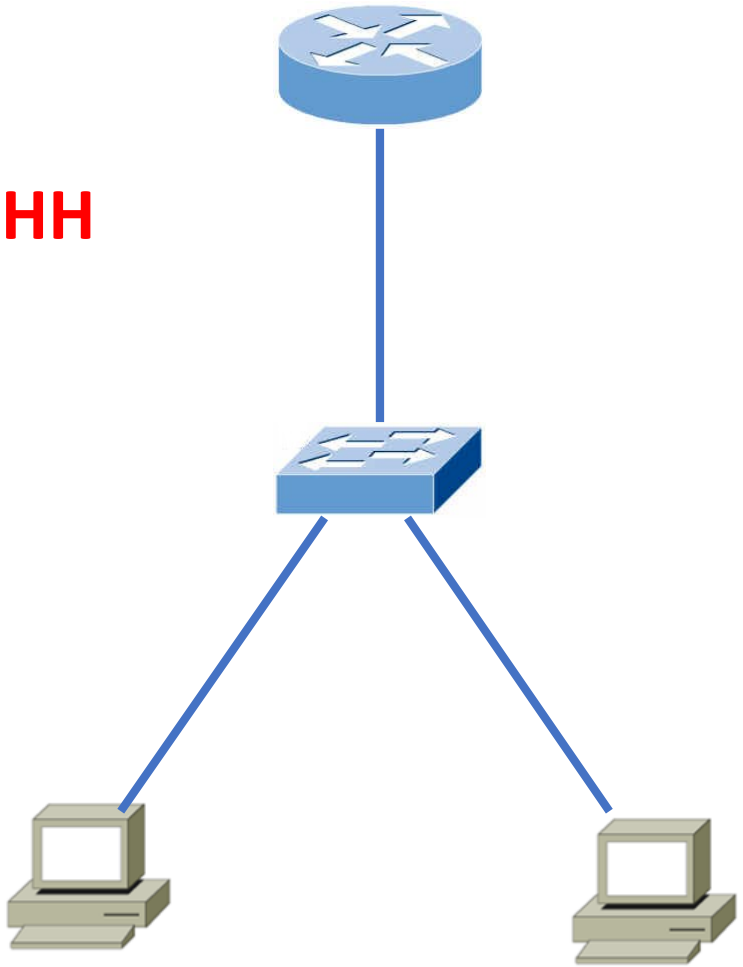
CLASS C ADDRESS

192.168.20.0

NNNNNNNN.NNNNNNNN.NNNNNNNN.HHHHHHHH

1	2	3
(2)	(4)	(8)
1	10	000
0	01	111
	11	001
	00	etc

8 BITS = 256 COMBINATIONS OR ADDRESSES



HOST BITS

192.168.20.0

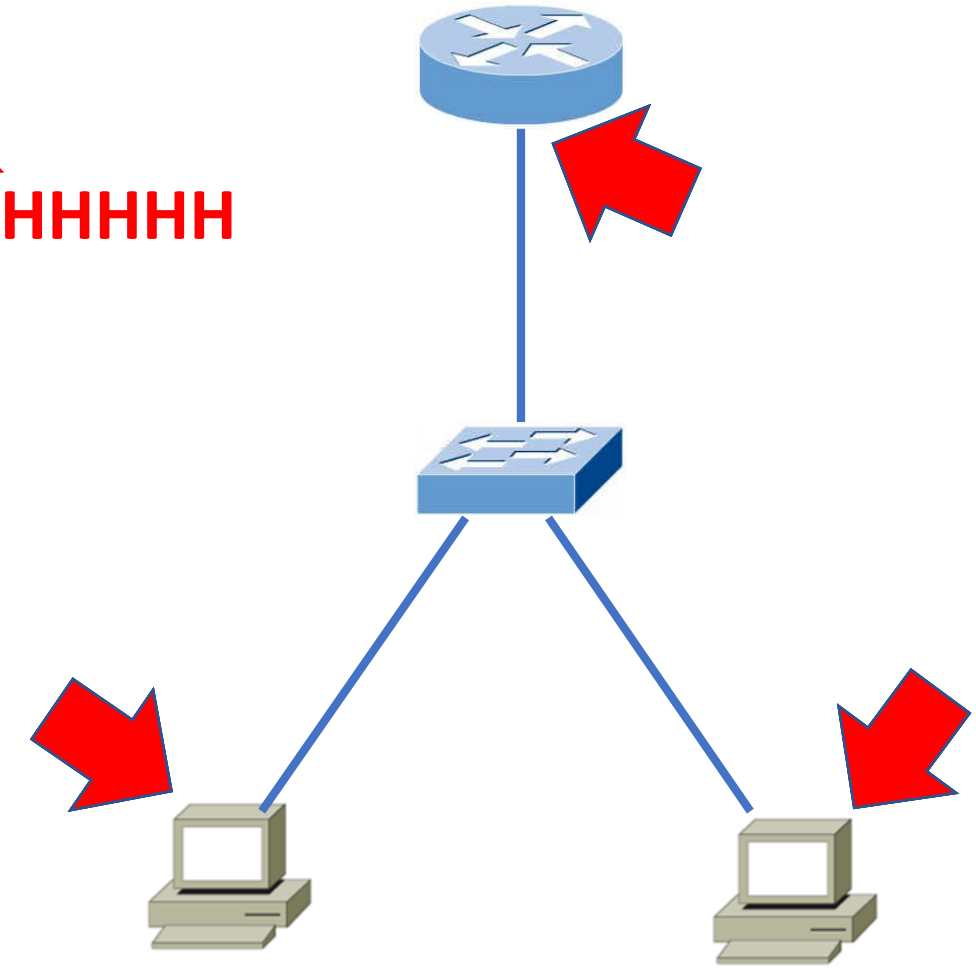
NNNNNNNN.NNNNNNNN.NNNNNNNN.HHHHHHHH

8 BITS WILL EQUAL 256 ADDRESSES

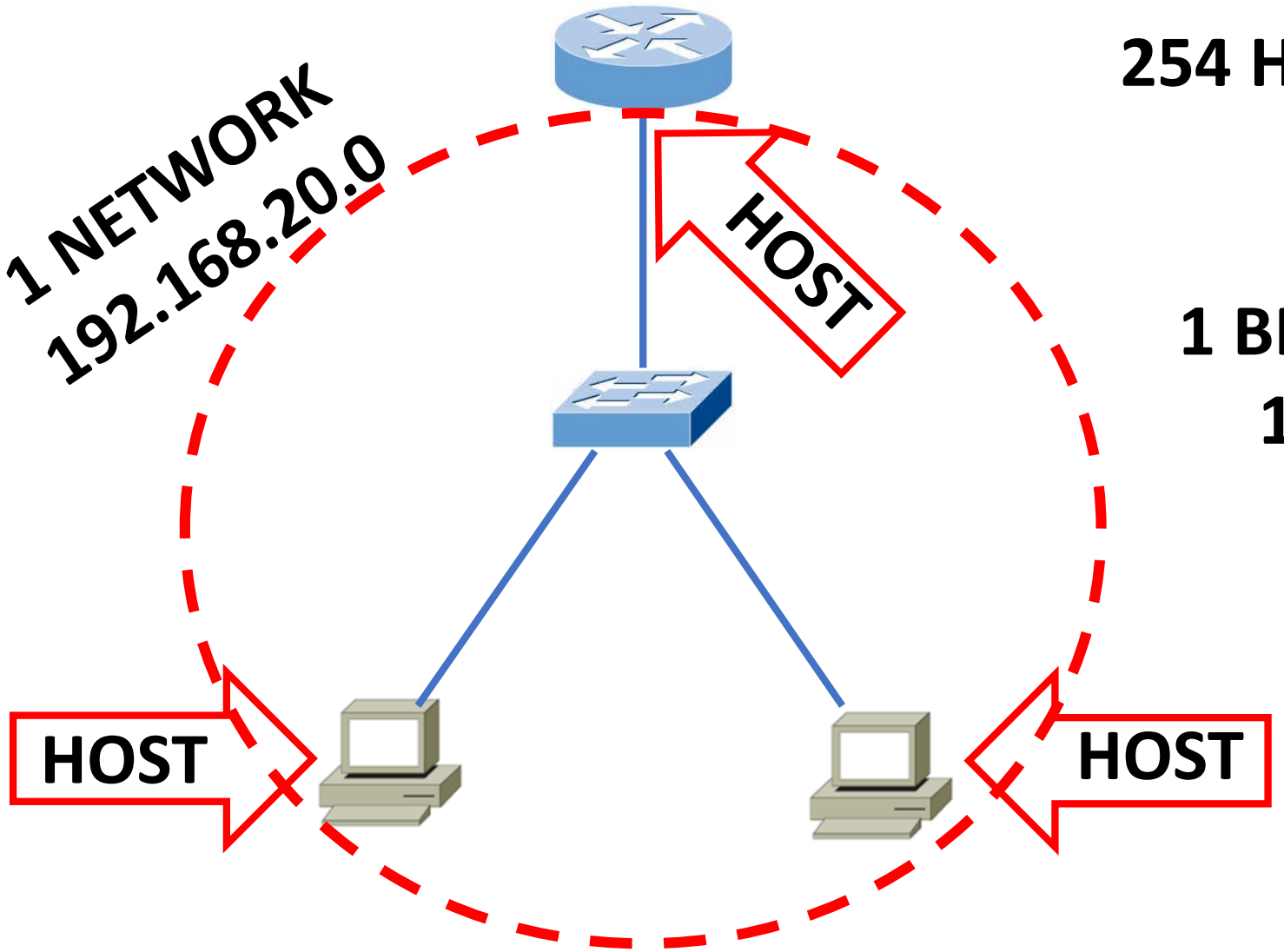
- **FOR PORTS ON THE ROUTER**
- **FOR DEVICE ADDRESSES**

also for

- **FOR NETWORK ADDRESSES**
- **FOR BROADCAST ADDRESSES**



192.168.20.0 NNNNNNNN.NNNNNNNN.NNNNNNNN.HHHHHHHH

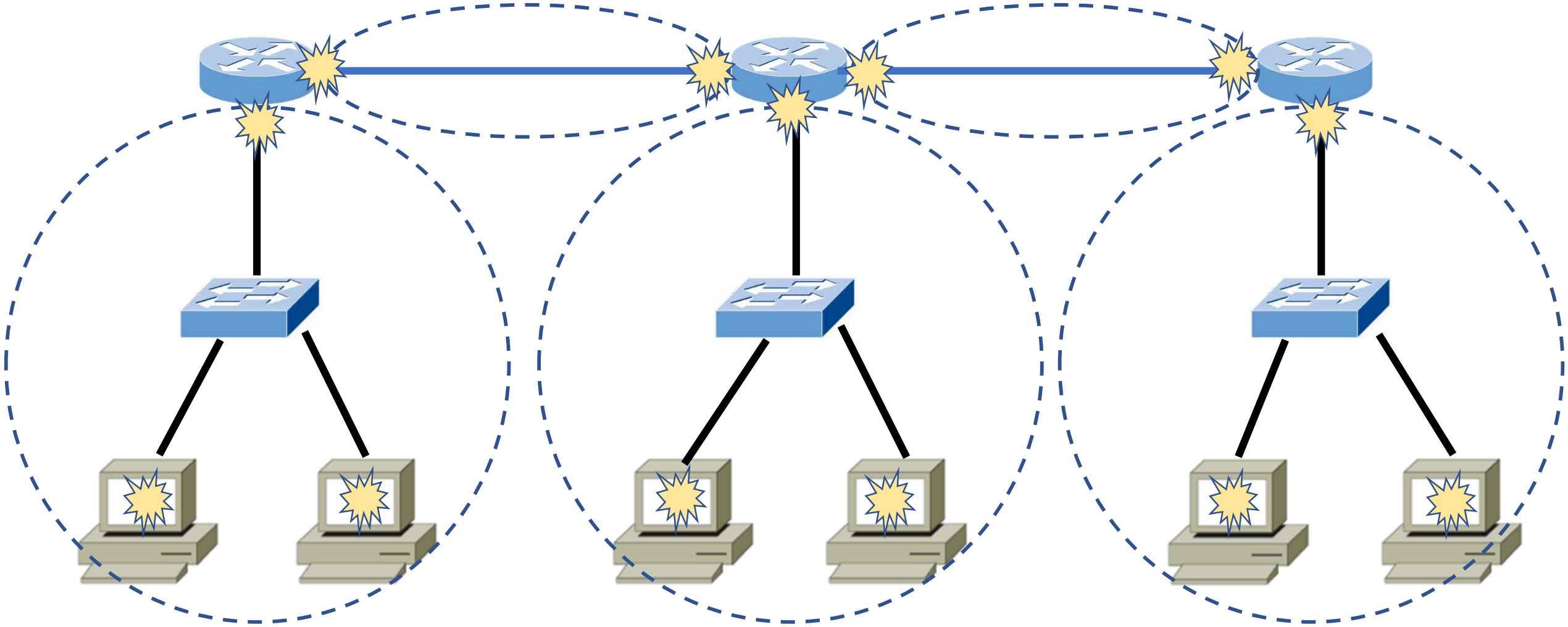


254 HOST ADDRESSES

1 BROADCAST ADDR
192.168.20.255

192.168.20.0

NNNNNNNN.NNNNNNNN.NNNNNNNN.HHHHHHHH



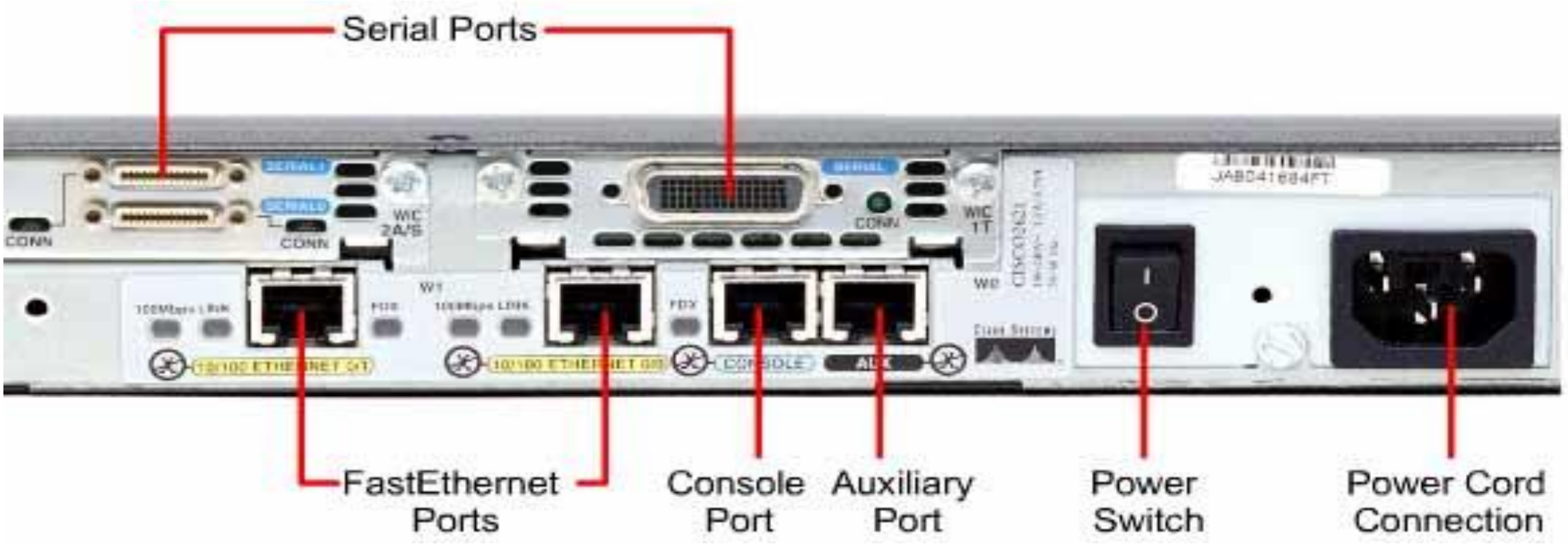
BORROW 3
= 8 SUBNETS

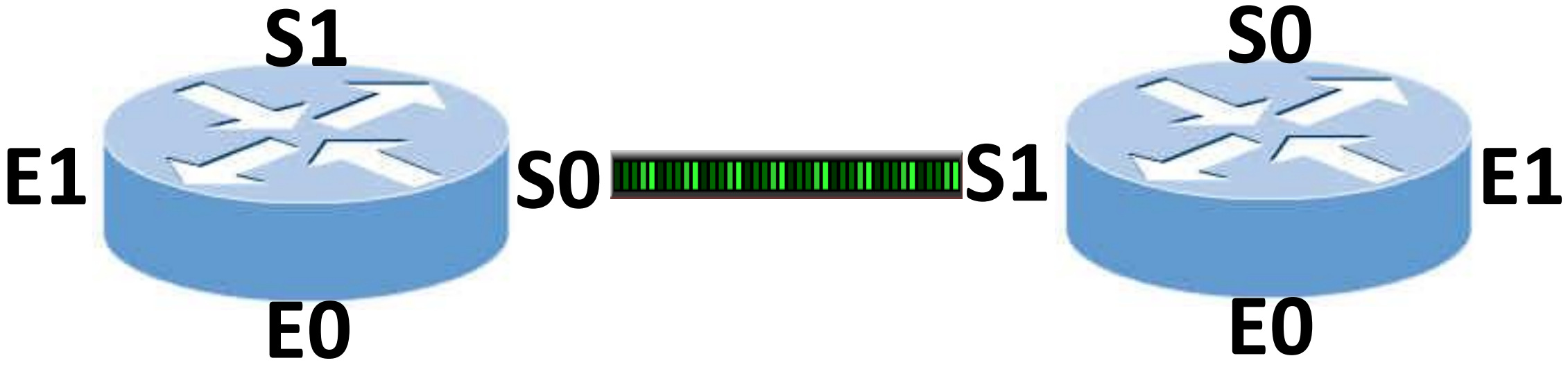
5 BITS LEFT
= 32 HOSTS EACH SN

192.168.20.0

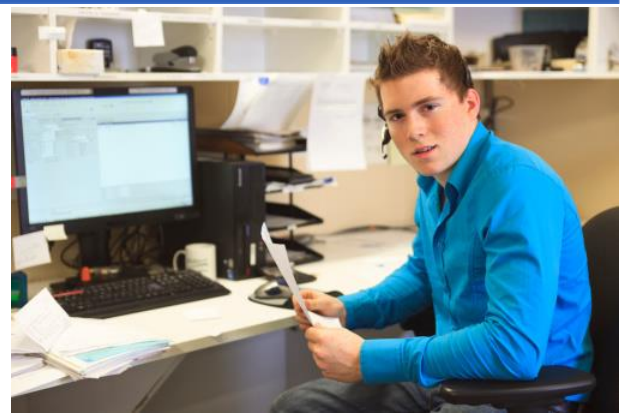
NNNNNNNN.NNNNNNNN.NNNNNNNN.NNNHHHHH

	SUBNET ADDRESS	HOST ADDR	BROADCAST ADDR
0	192.168.20.0	192.168.20.1 TO 192.168.20.30	192.168.20.31
32	192.168.20.32	192.168.20.33 TO 192.168.20.62	192.168.20.63
64	192.168.20.64	192.168.20.65 TO 192.168.20.94	192.168.20.95
96	192.168.20.96	192.168.20.97 TO 192.168.20.126	192.168.20.127
128	192.168.20.128	192.168.20.129 TO 192.168.20.158	192.168.20.159
160	192.168.20.160	192.168.20.161 TO 192.168.20.190	192.168.20.191
192	192.168.20.192	192.168.20.193 TO 192.168.20.222	192.168.20.223
224	192.168.20.224	192.168.20.225 TO 192.168.20.254	192.168.20.255


Serial Ports
FastEthernet Ports
Console Port
Auxiliary Port
Power Switch
Power Cord Connection

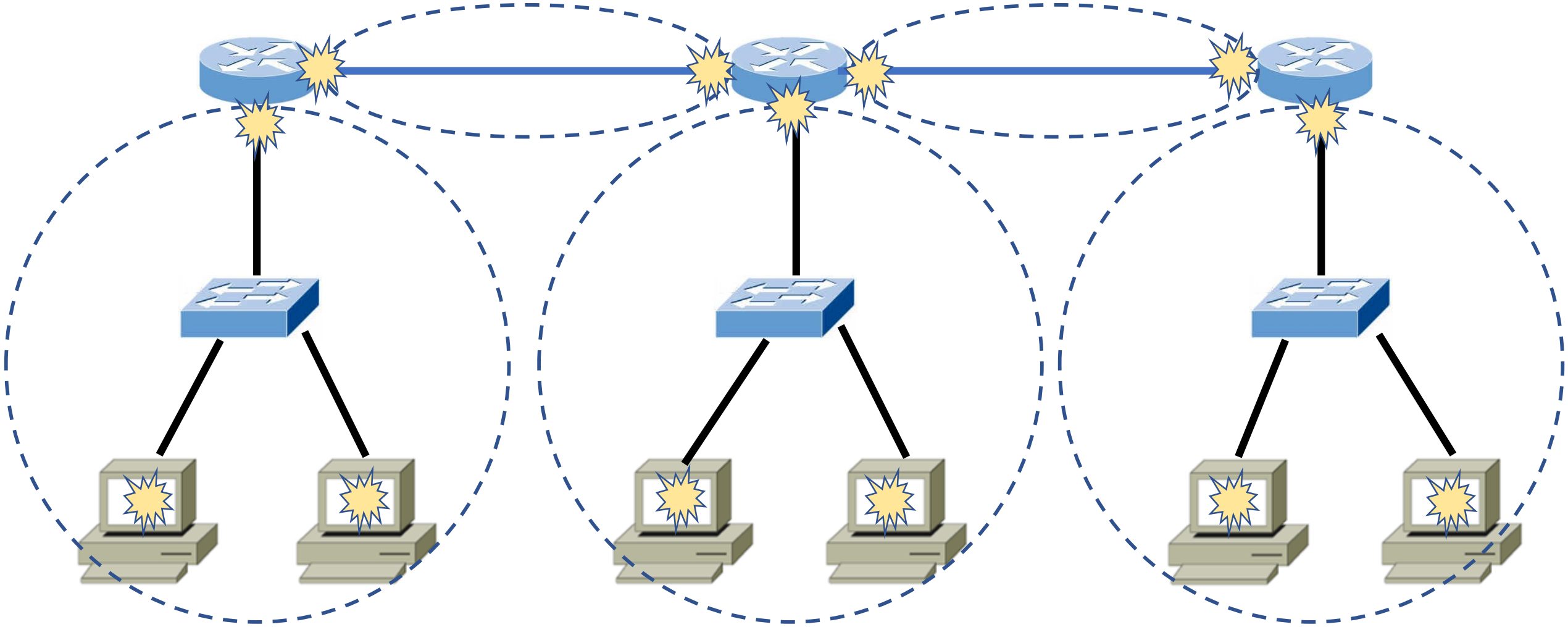

S1
E1
S0
E0
S0
S1
E1
E0

Now it’s your turn.



210.15.15.0

NNNNNNNN.NNNNNNNN.NNNNNNNN.HHHHHHHH



210.15.15.0

NNNNNNNN.NNNNNNNN.NNNNNNNN.NNNNNNNN

0

SUBNET ADDRESS	HOST ADDR	BROADCAST ADDR


Thank you!