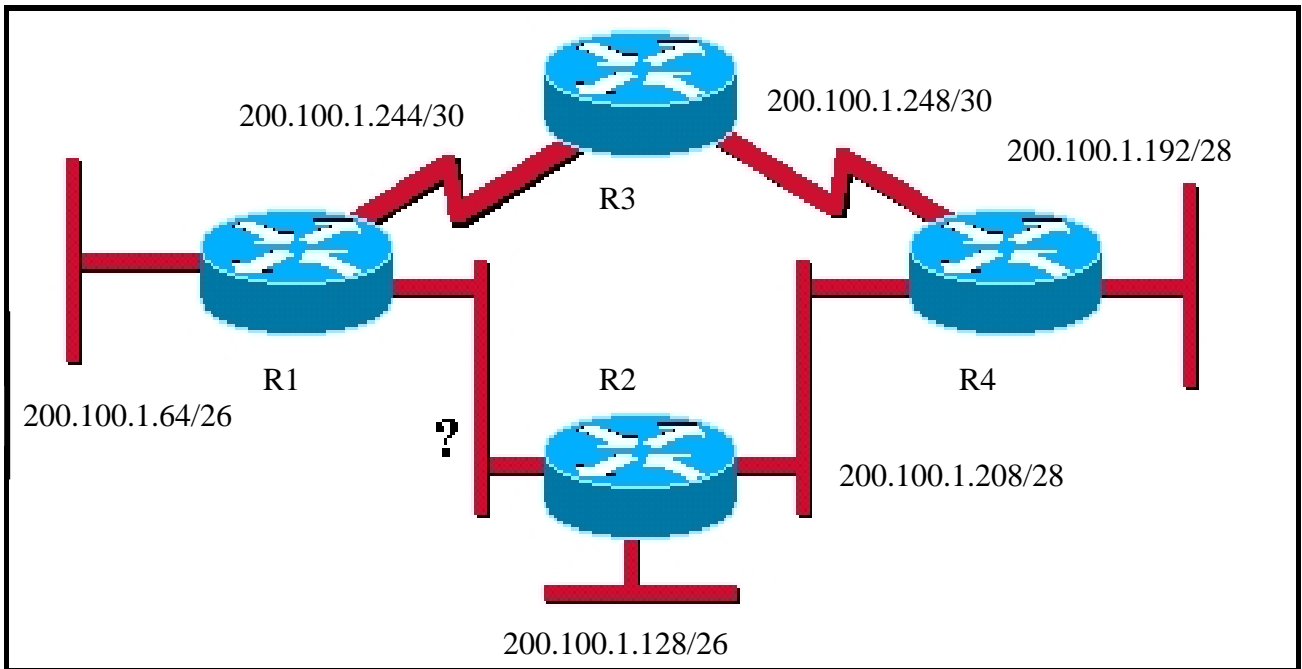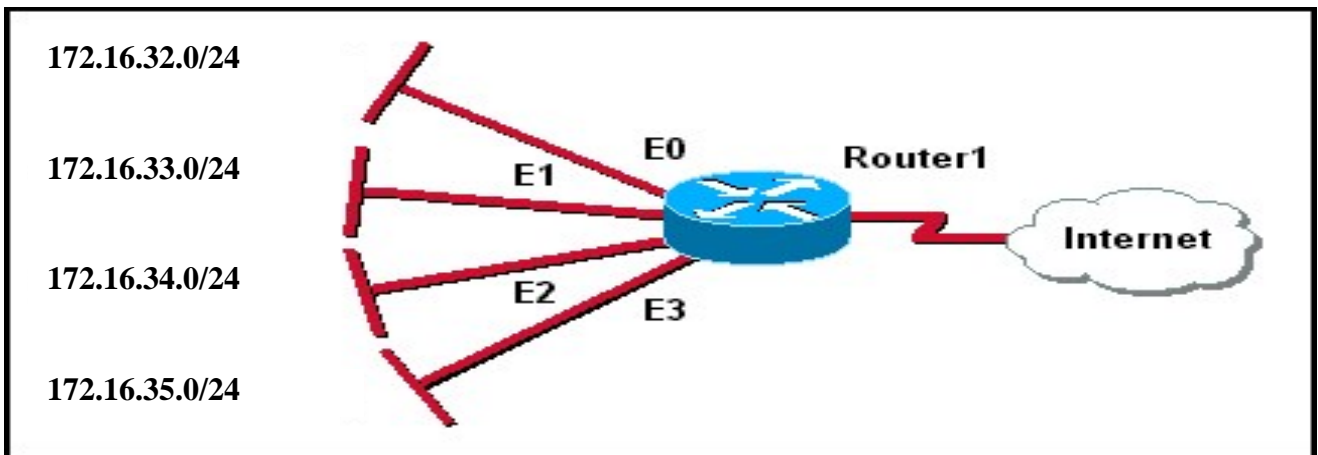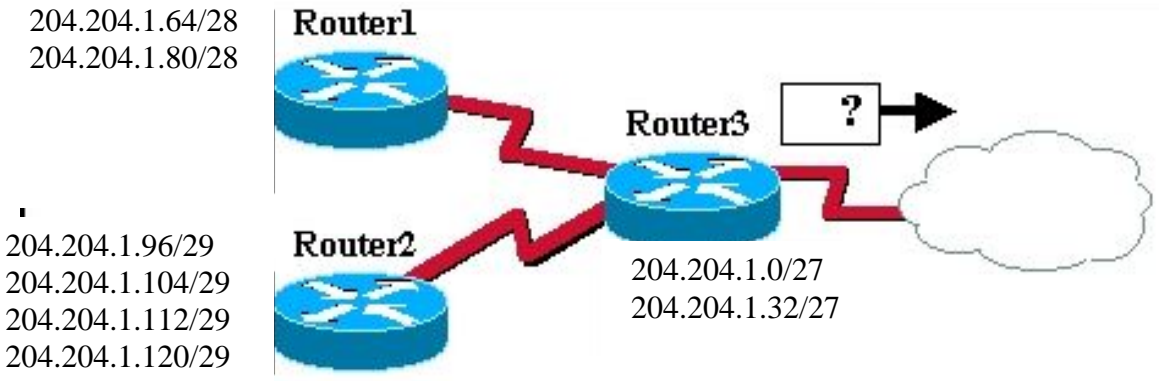CCNA 3 VLSM Worksheet

1

An additional subnet is required for a new Ethernet link between Router1 and Router2 as shown in the diagram. What subnet addresses can be configured in this network to provide a maximum of 14 useable addresses for this link while wasting the fewest addresses?

2. Refer to the network shown. How will Router1 summarize and advertise the four networks attached to its Ethernet ports?

204.204.1.64/28
204.204.1.80/28

Router1

Router3

?

204.204.1.96/29
204.204.1.104/29
204.204.1.112/29
204.204.1.120/29

Router2

204.204.1.0/27
204.204.1.32/27

3. The routers in the diagram use the subnet assignments shown. What is the most efficient **route summary** that can be configured on Router3 to advertise the internal networks to the cloud?

HQ

R2

R3

R4

29 Host

12 Host

35 Host
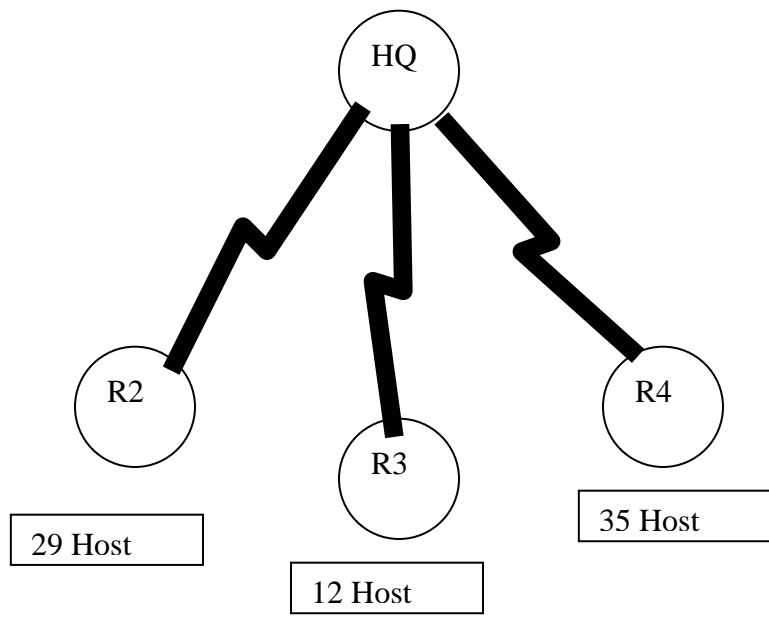
4

A Class C address has been assigned for use in the network shown in the graphic. Using VLSM, which bit mask should be used to provide for the number of host addresses required on Router A, while wasting the fewest addresses?
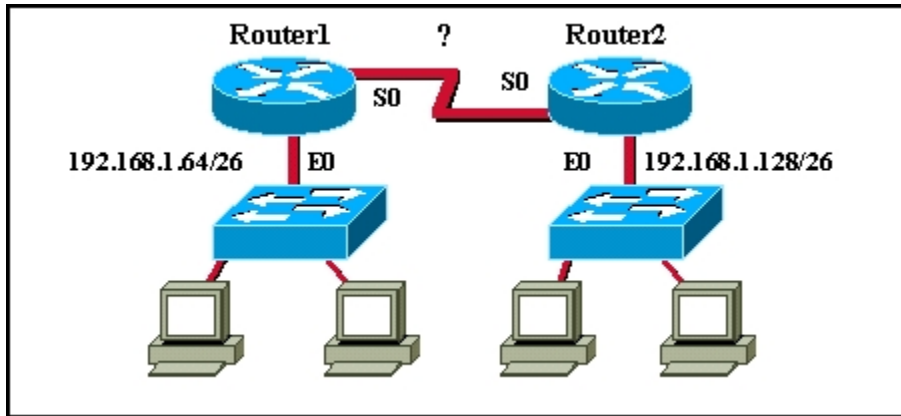
5

Router1 and Router2 shown in the topology have been configured with the no ip subnet-zero command. What valid VLSM network numbers could be used for the serial link between Router1 and Router2?