

Chapter 5

Subnetting and Supernetting

- Subnetting
- Masking
- Examples of Subnetting
- Variable-Length Subnetting
- Supernetting

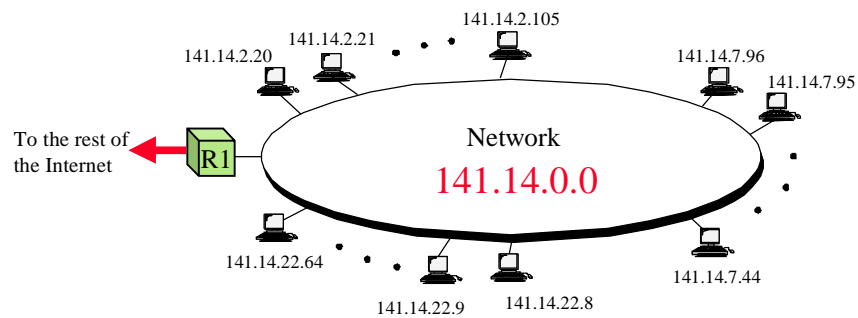
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5-1

Figure 5-1

A network with two levels of hierarchy (not subnetted)

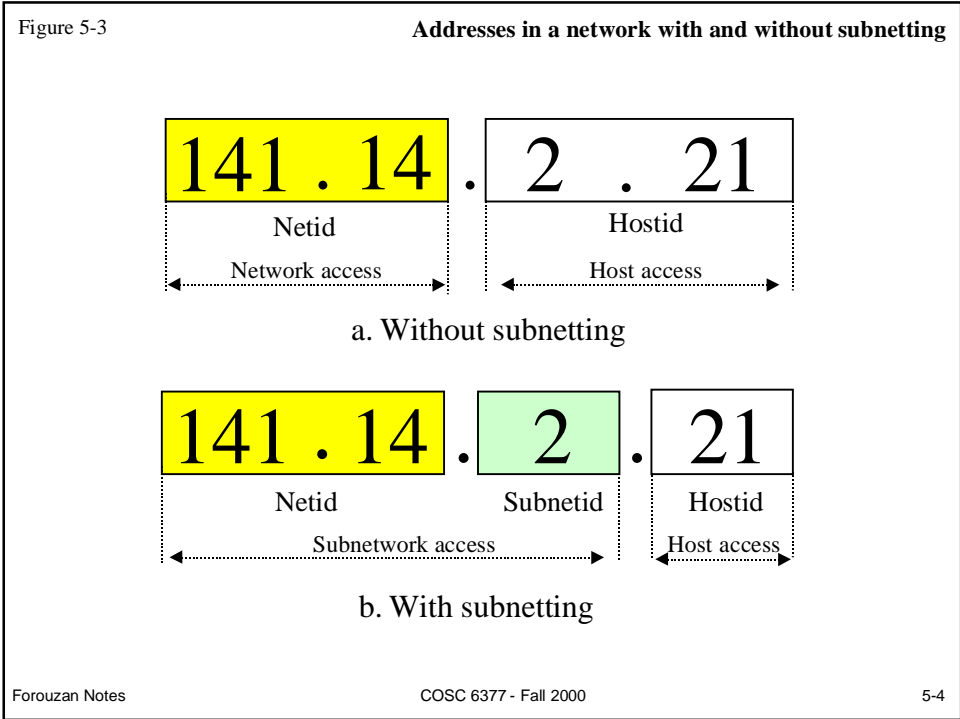
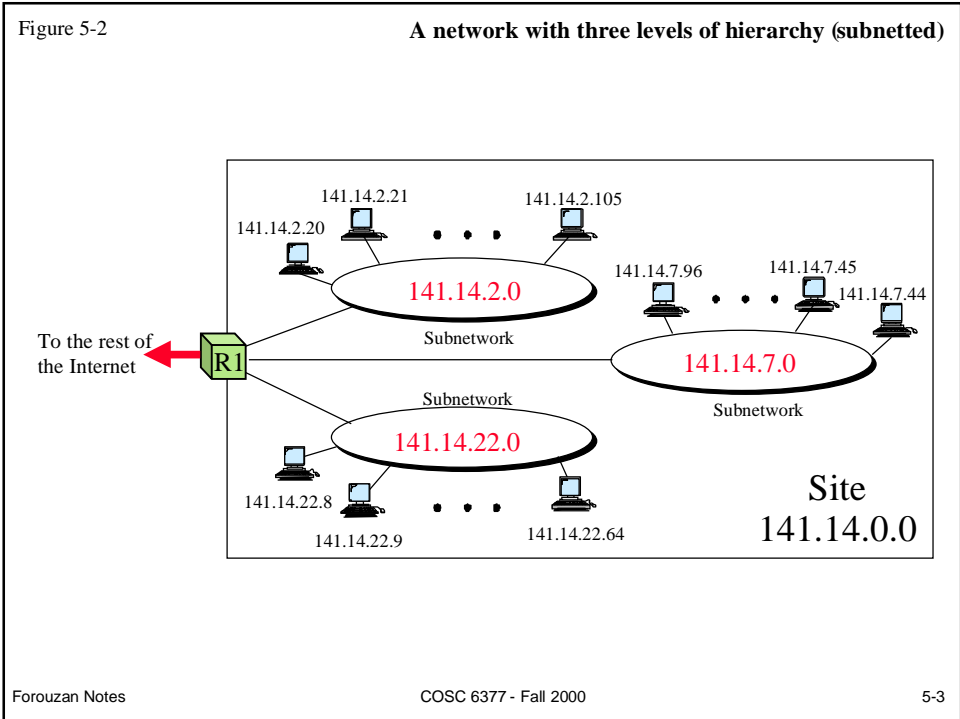


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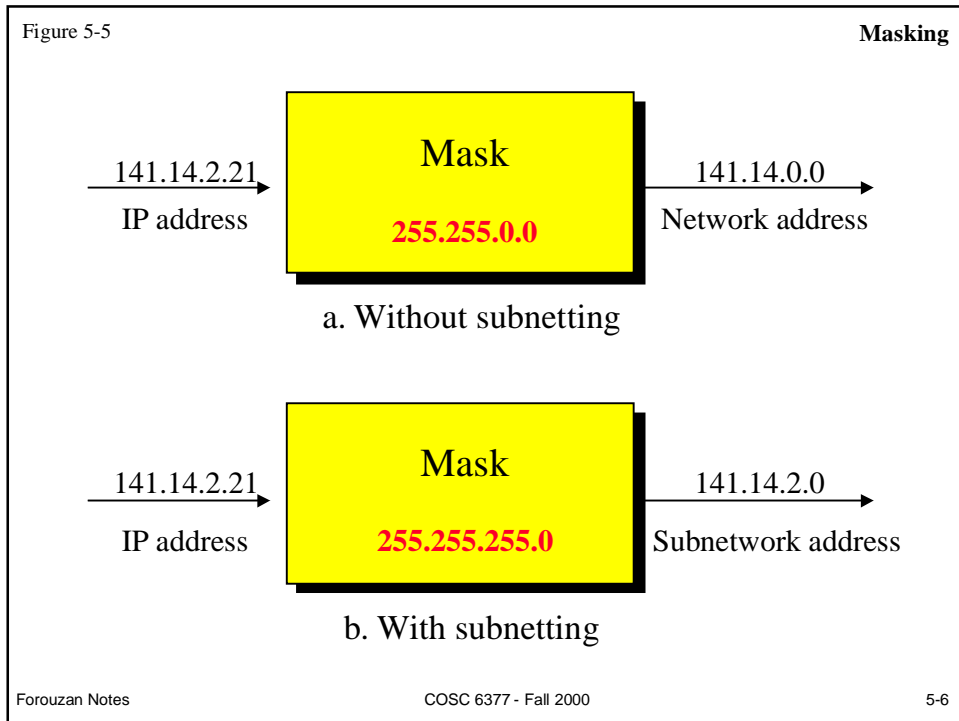
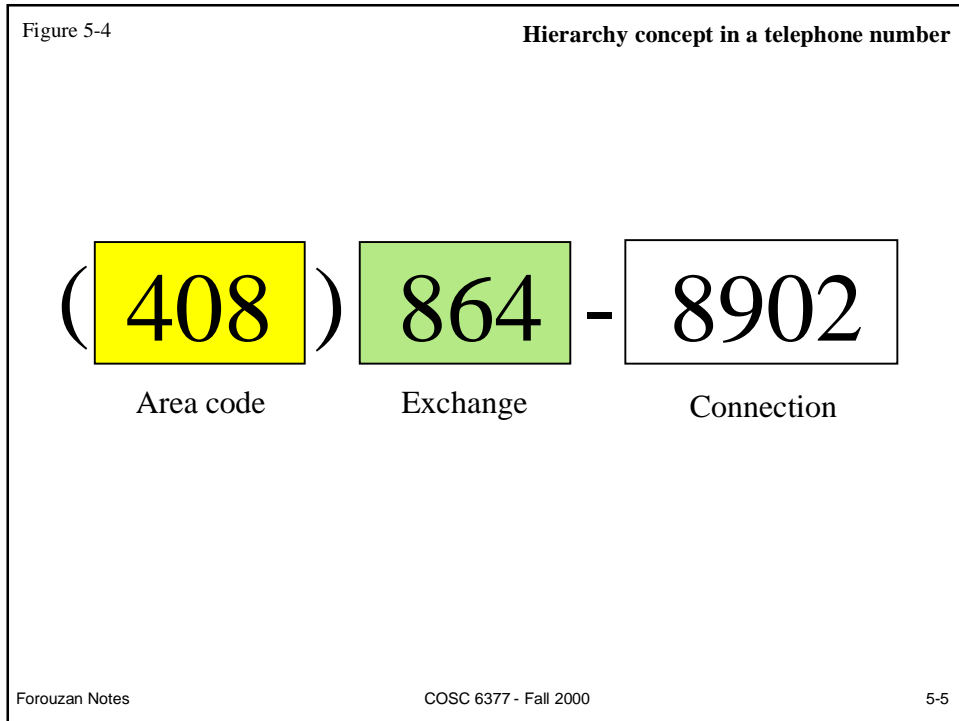
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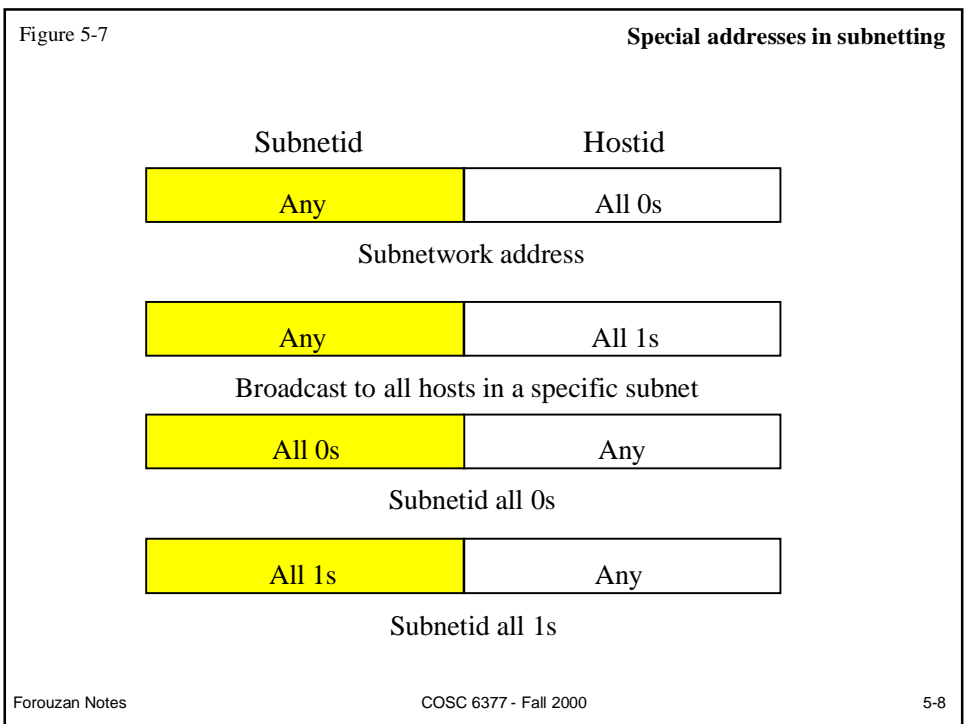
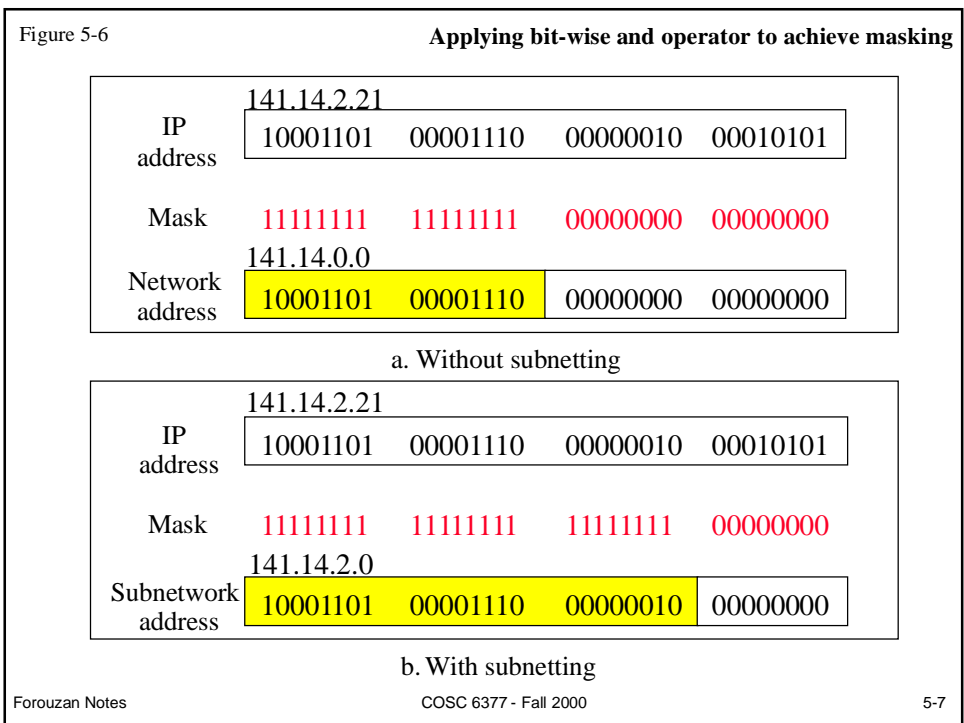
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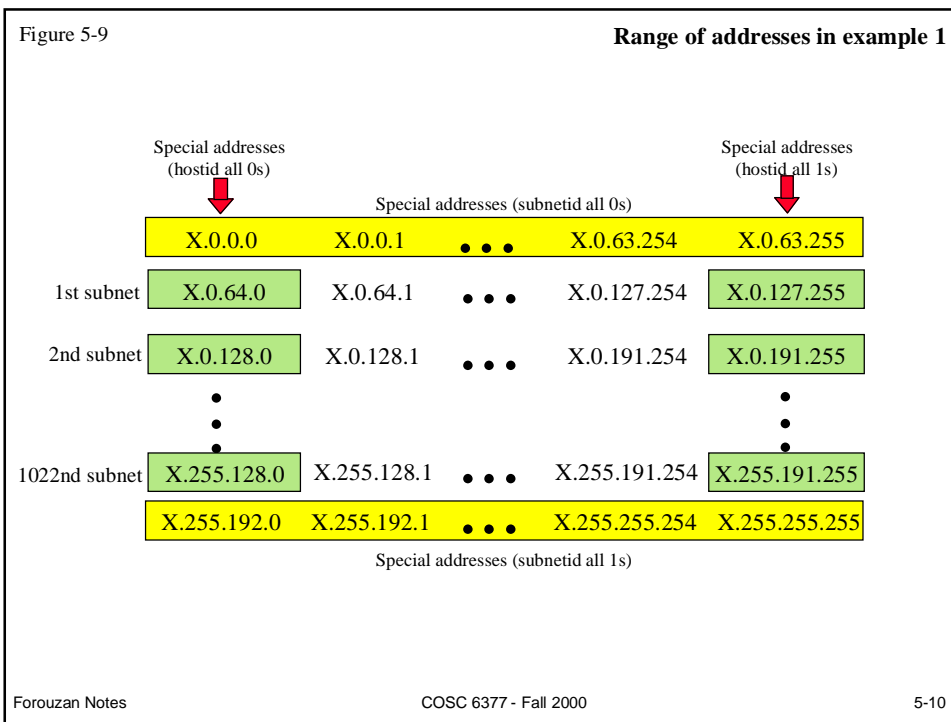
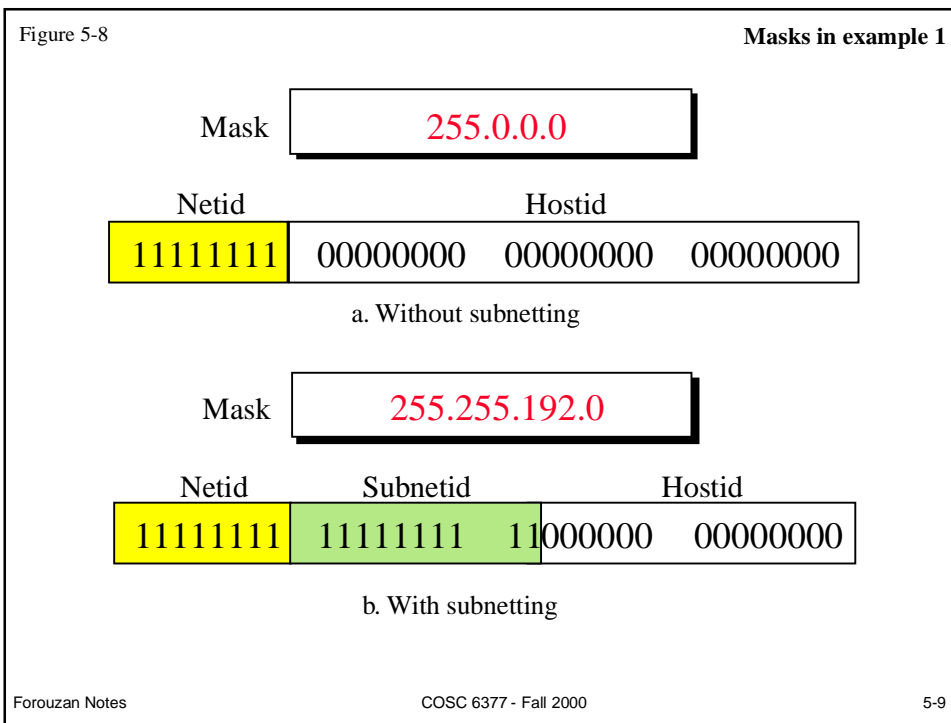
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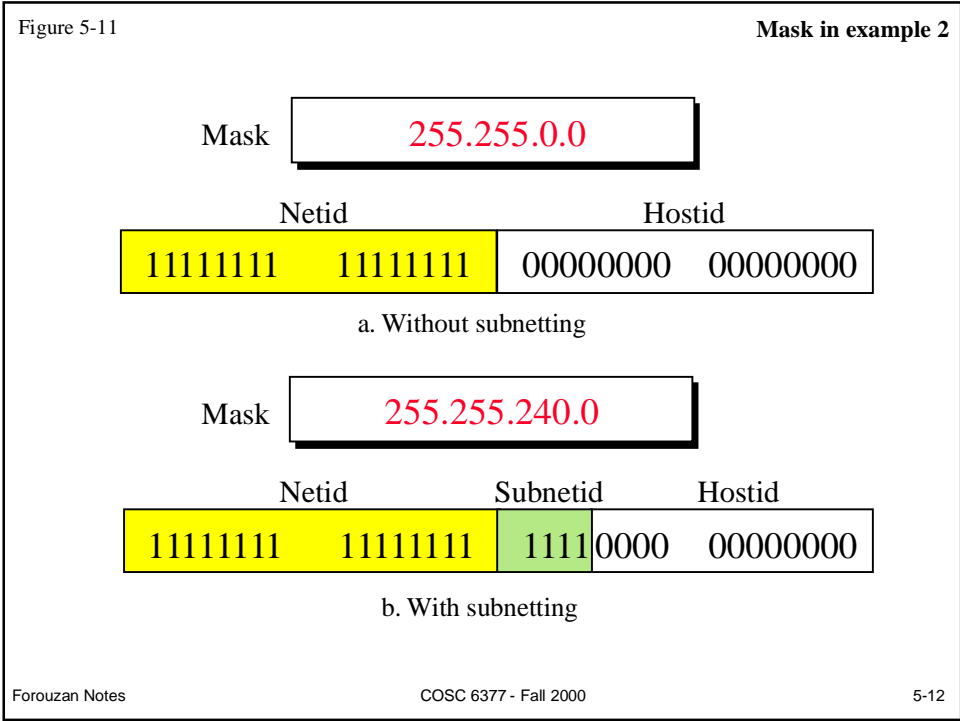
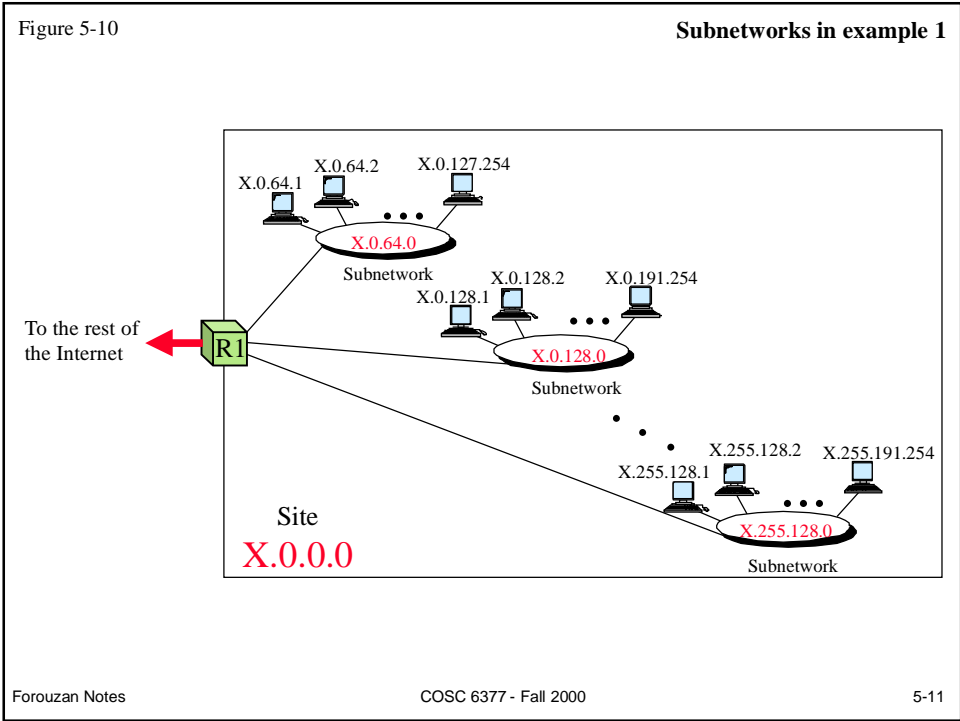
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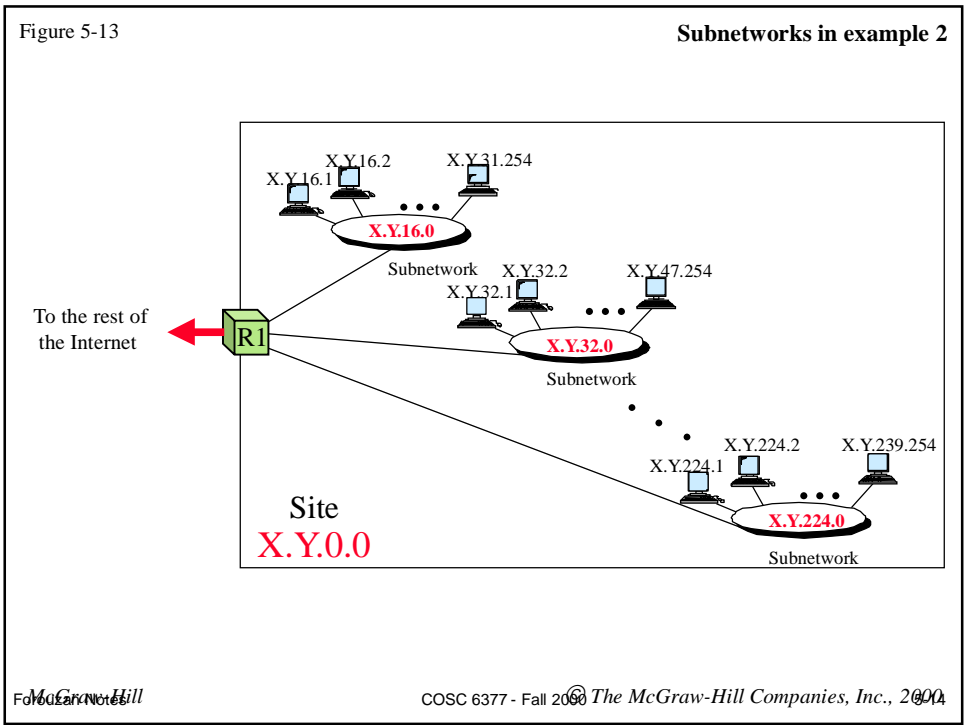
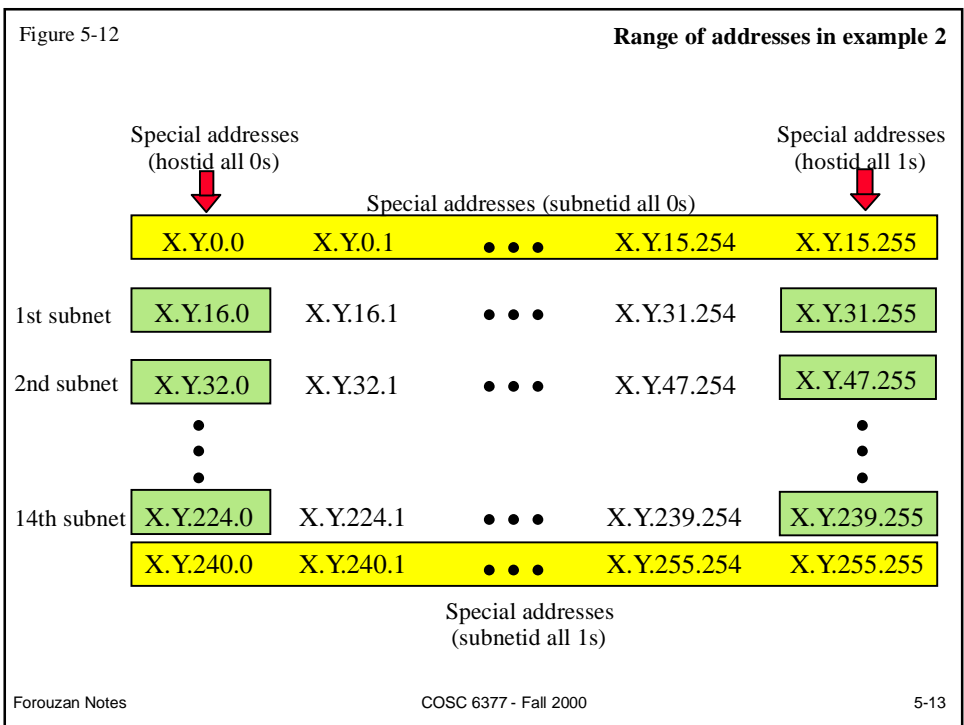
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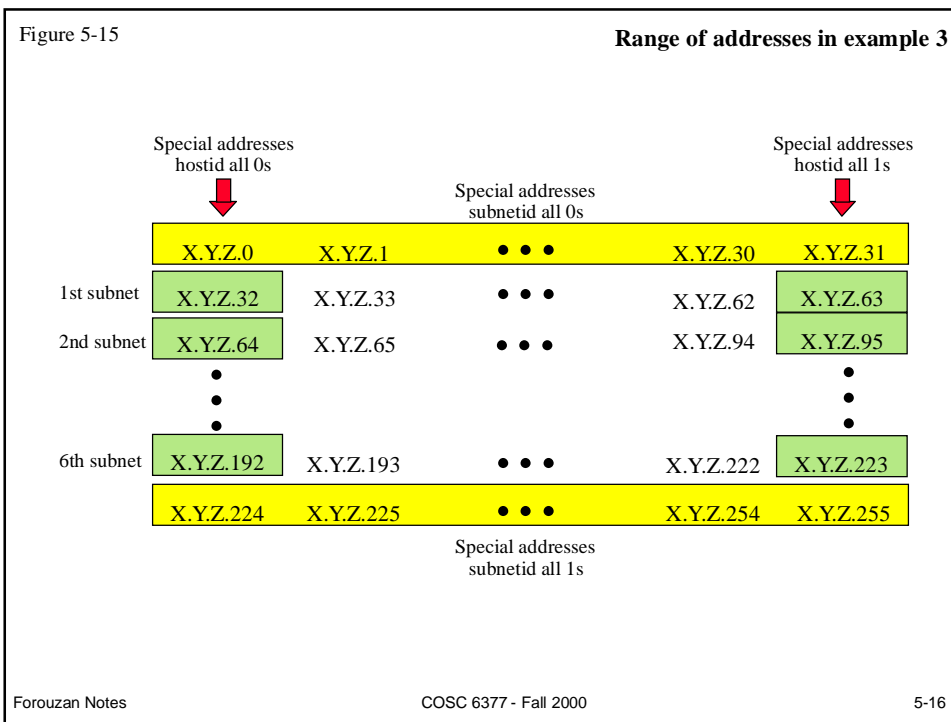
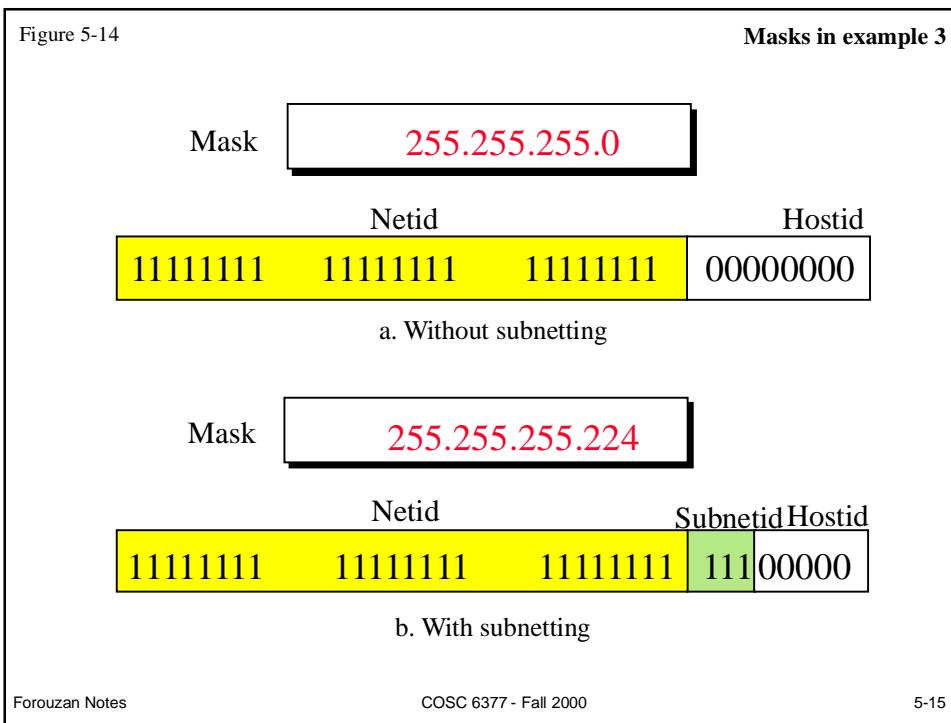
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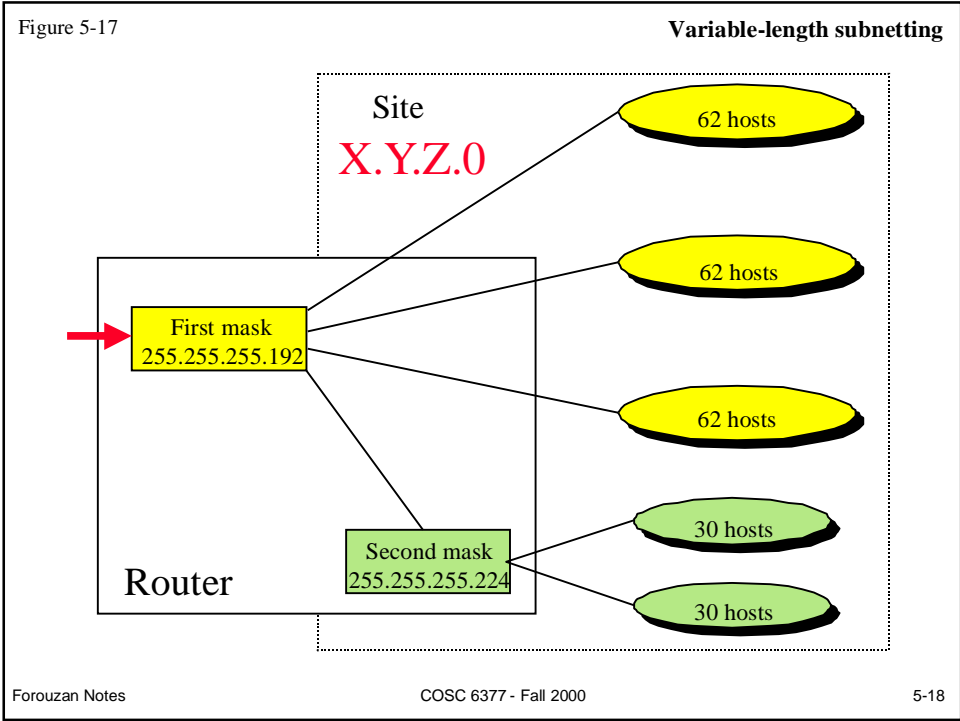
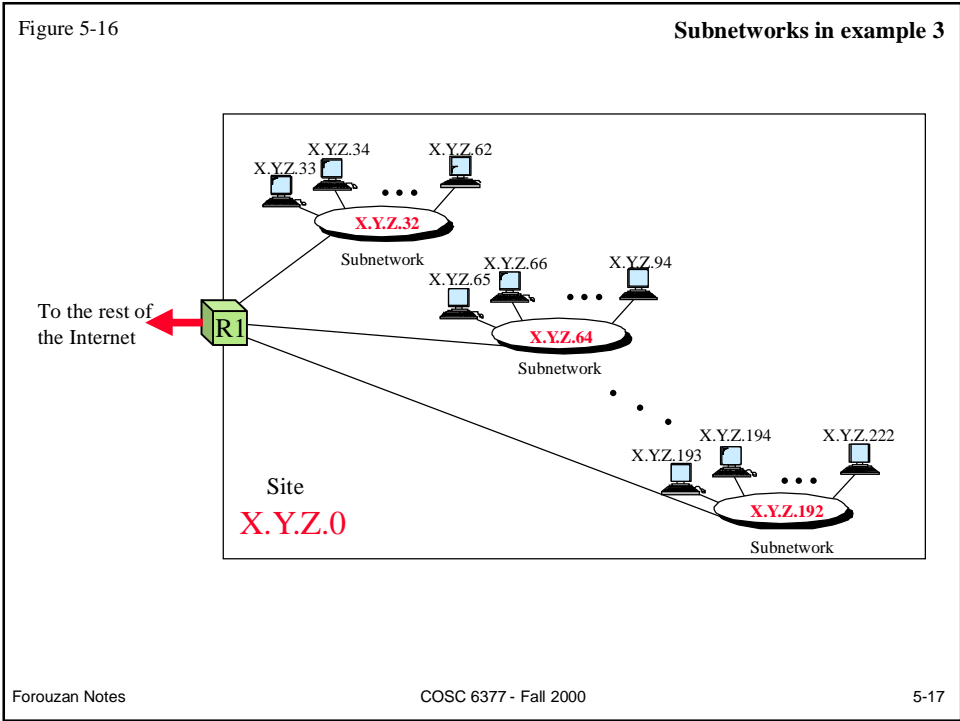
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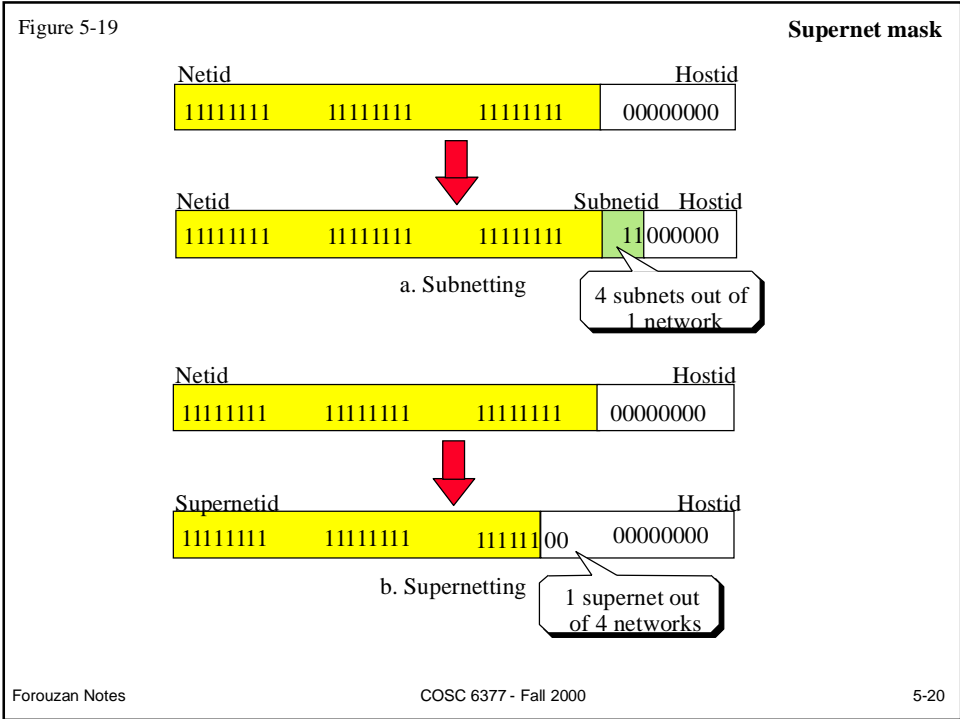
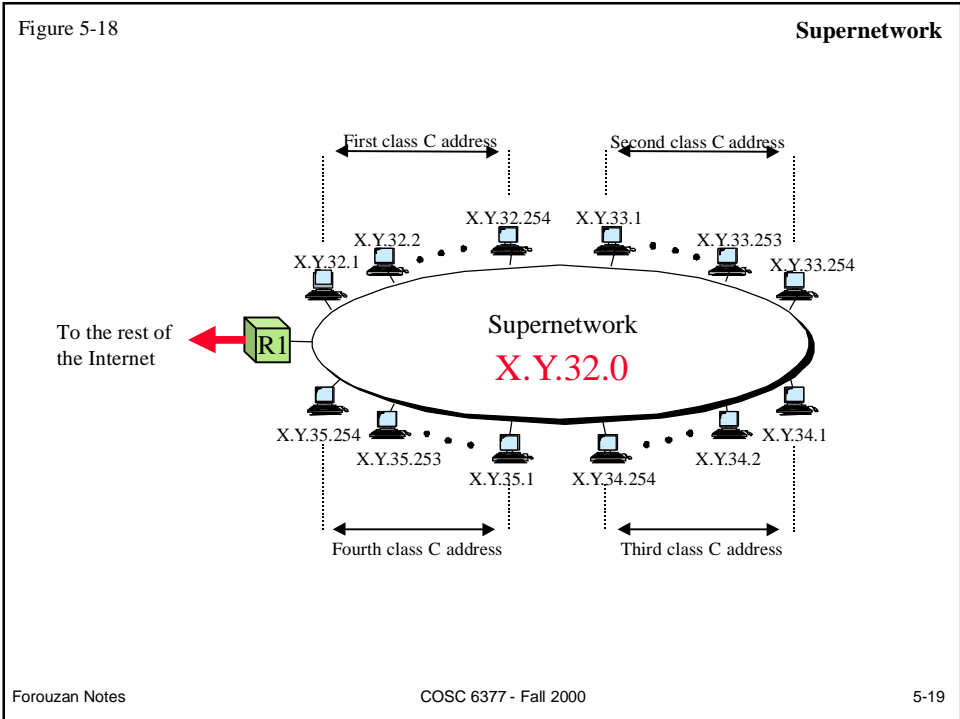
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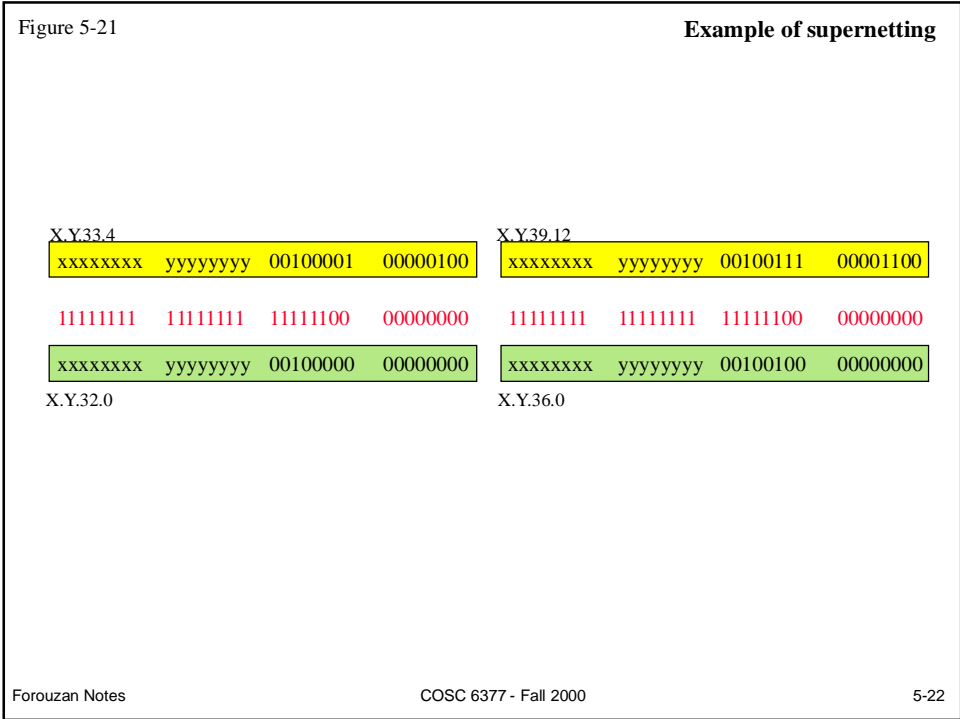
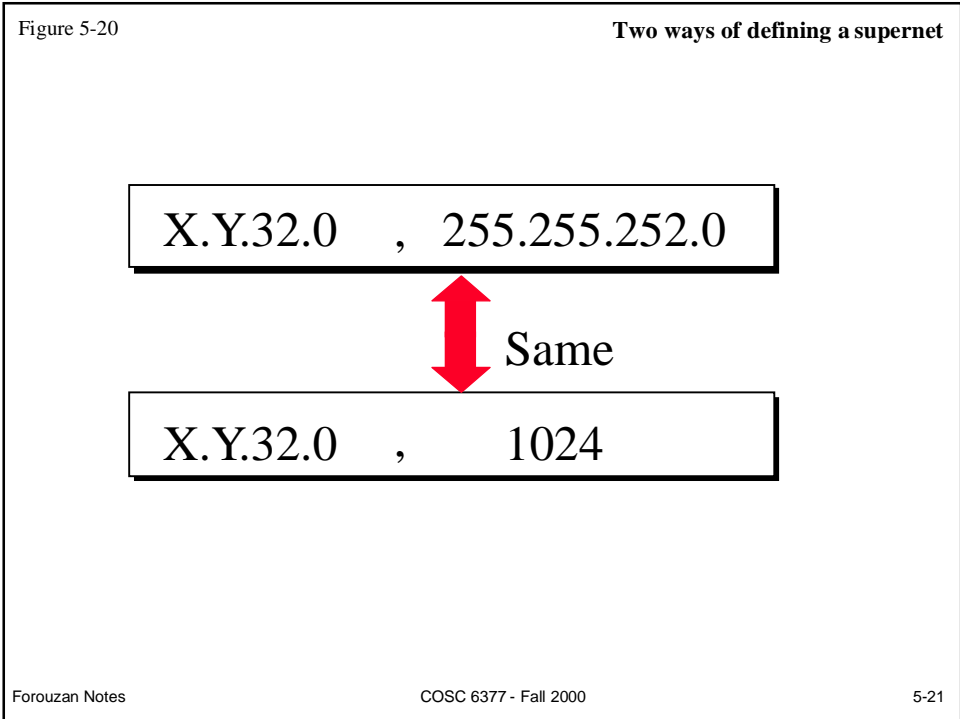
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Figure 5-22

CIDR

Default mask	Network address	Next hop address
255.255.255.0	X.Y.32.0
255.255.255.0	X.Y.33.0
255.255.255.0	X.Y.34.0
255.255.255.0	X.Y.35.0
⋮	⋮	⋮

a. Routing table without supernet mask

Default mask	Network address	Next hop address
255.255.252.0	X.Y.32.0
⋮	⋮	⋮

b. Routing table with supernet mask