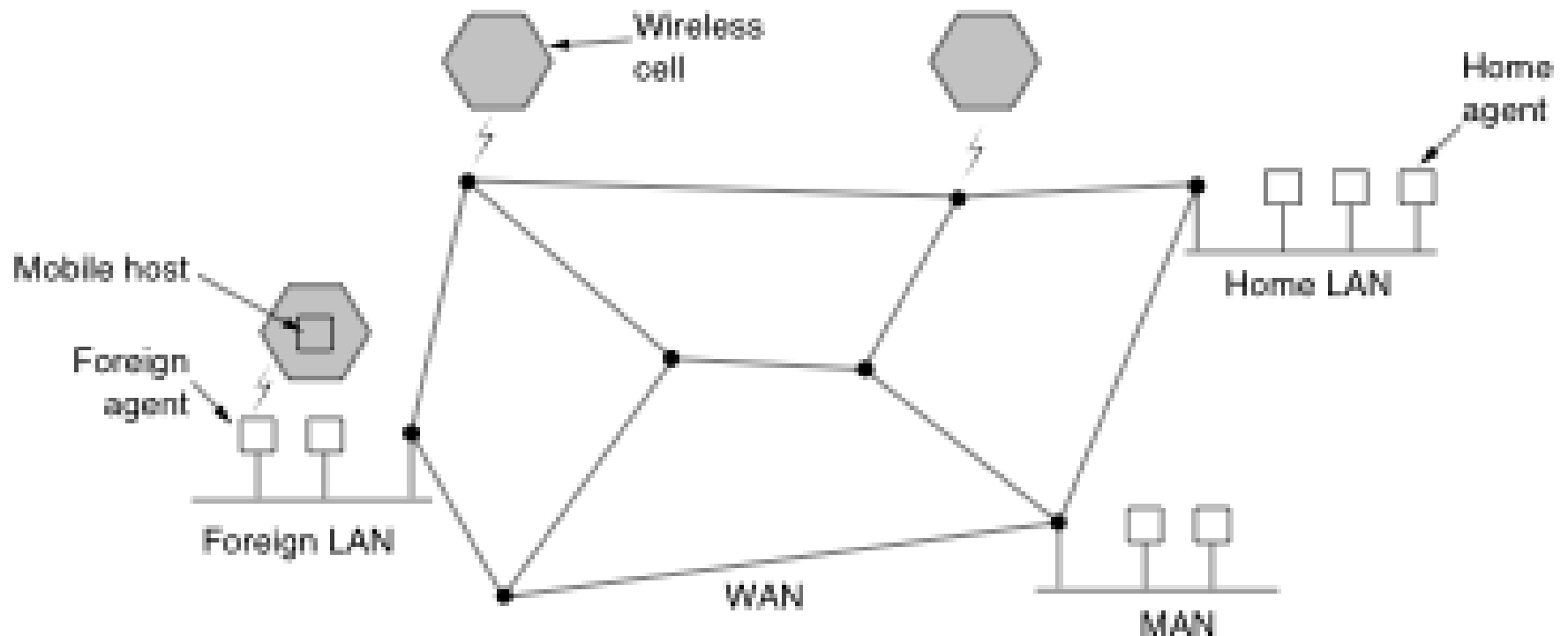


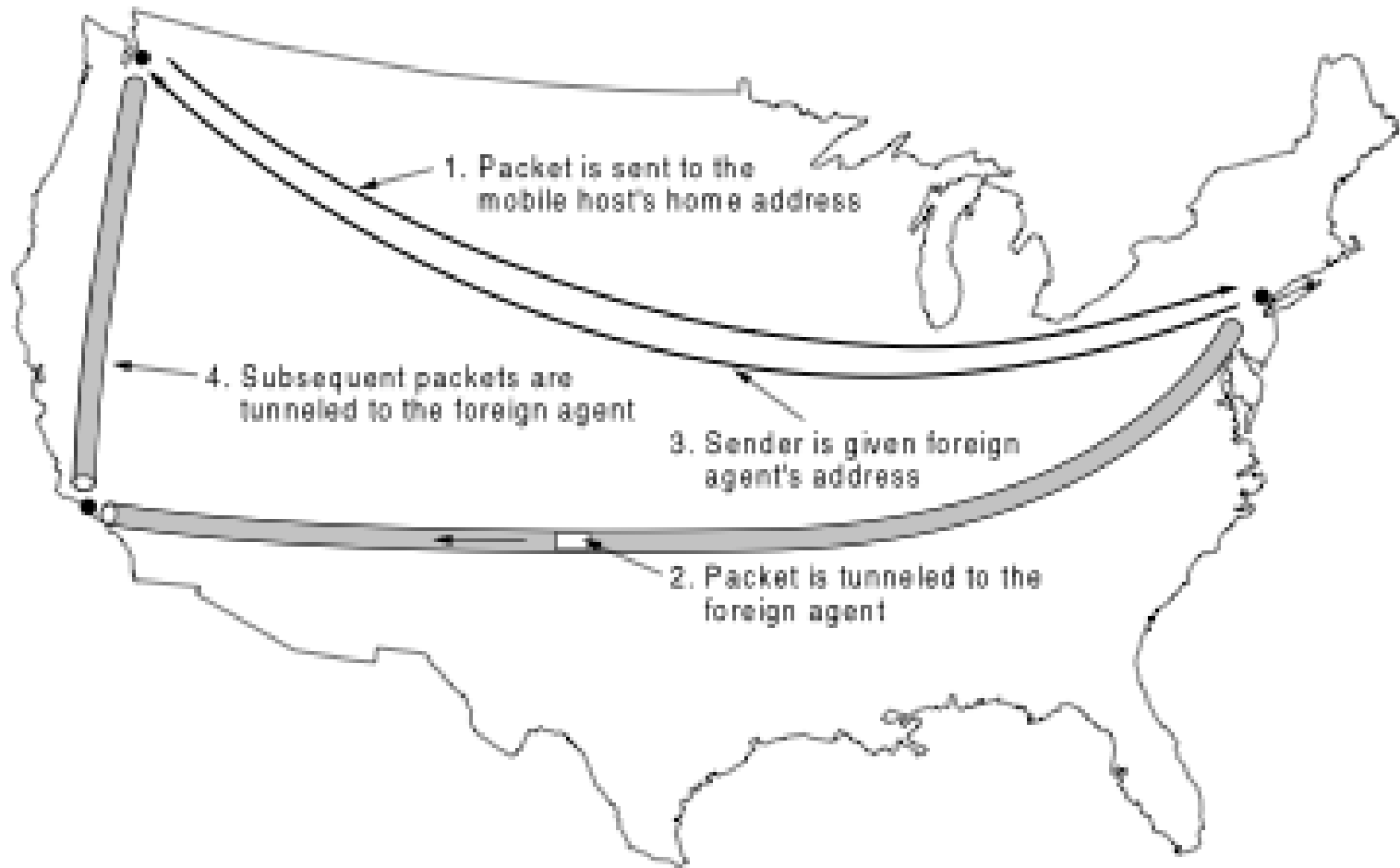
# Lecture 20

Internetworking

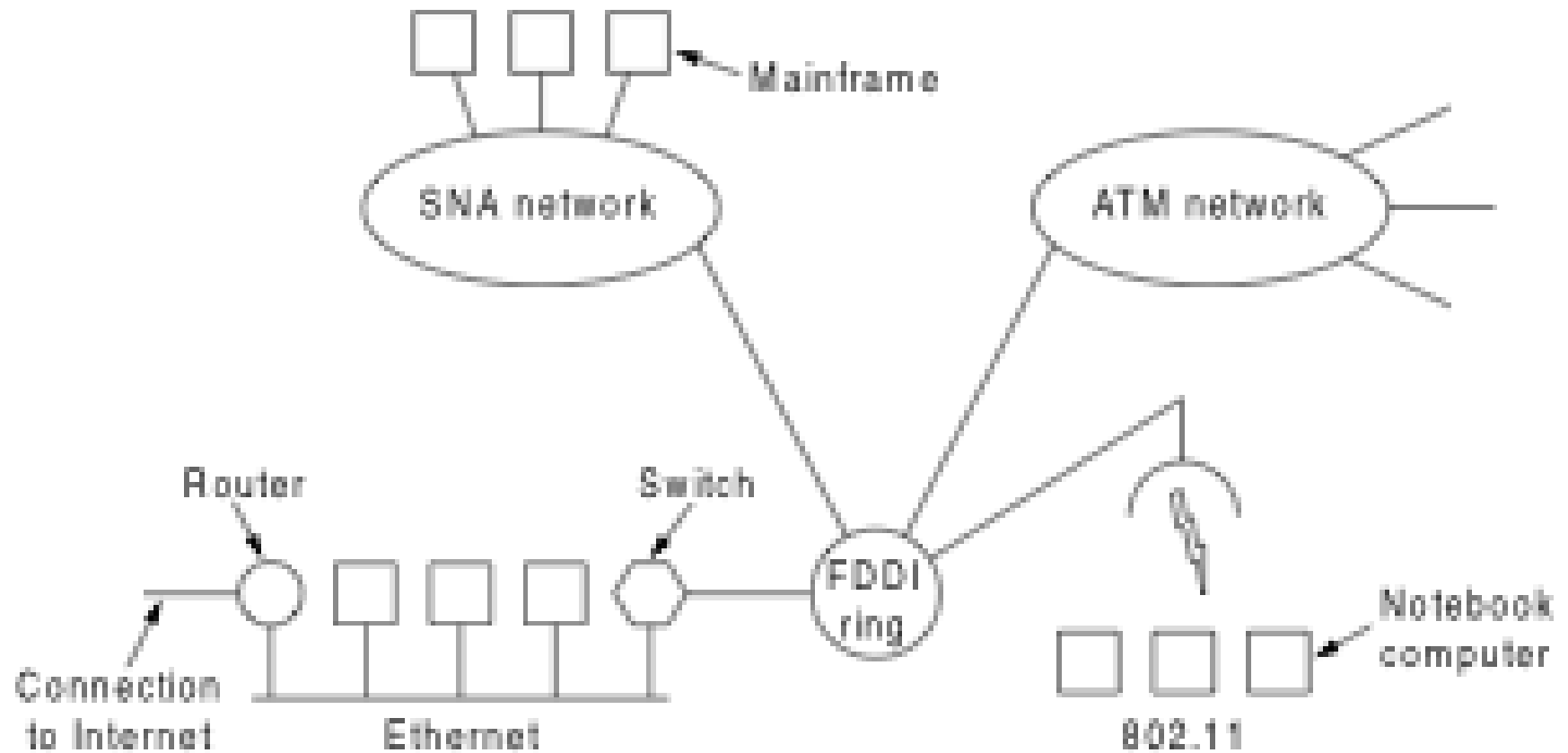
# Routing for Mobile Hosts



# Tunneling



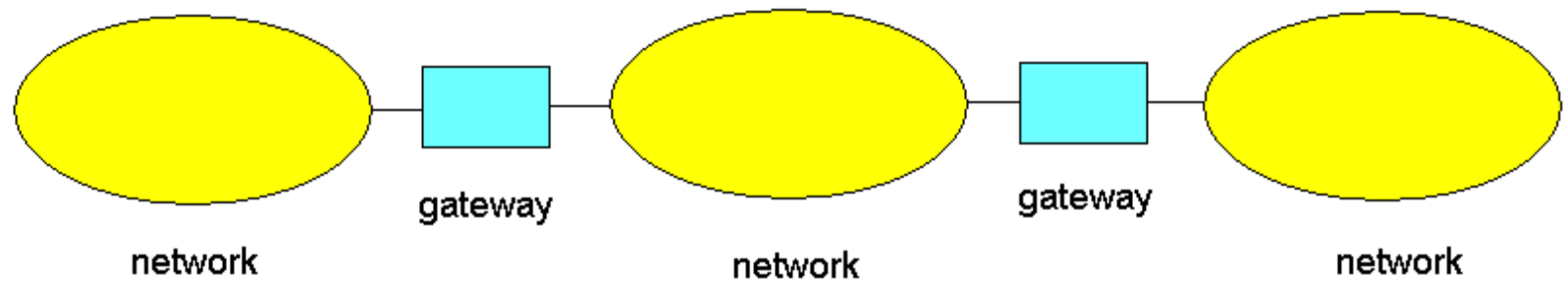
# Inter-connected Networks



# Difference Bet Newtorks

Item	Some Possiblities
Service offered	Connection oriented versus connectionless
Protocols	IP, IPX, SNA, ATM, MPLS, AppleTalk, etc.
Addressing	Flat (802) versus hierarchical (IP)
Multicasting	Present or absent (also broadcasting)
Packet size	Every network has its own maximum
Quality of service	Present or absent; many different kinds
Error handling	Reliable, ordered, and unordered delivery
Flow control	Sliding window, rate control, other, or none
Congestion control	Leaky bucket, token bucket, RED, choke packets, etc.
Security	Privacy rules, encryption, etc.
Parameters	Different timeouts, flow specifications, etc.
Accounting	By connect time, by packet, by byte, or not at all

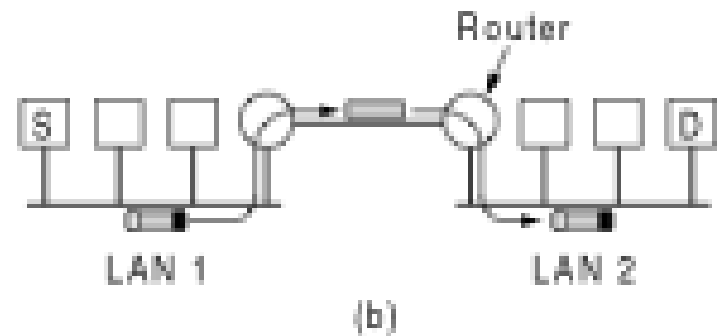
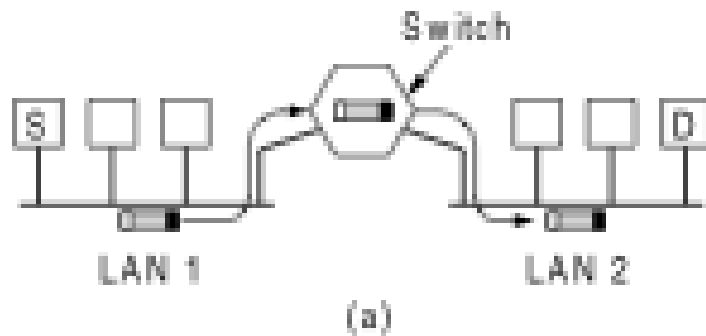
# Inter-network



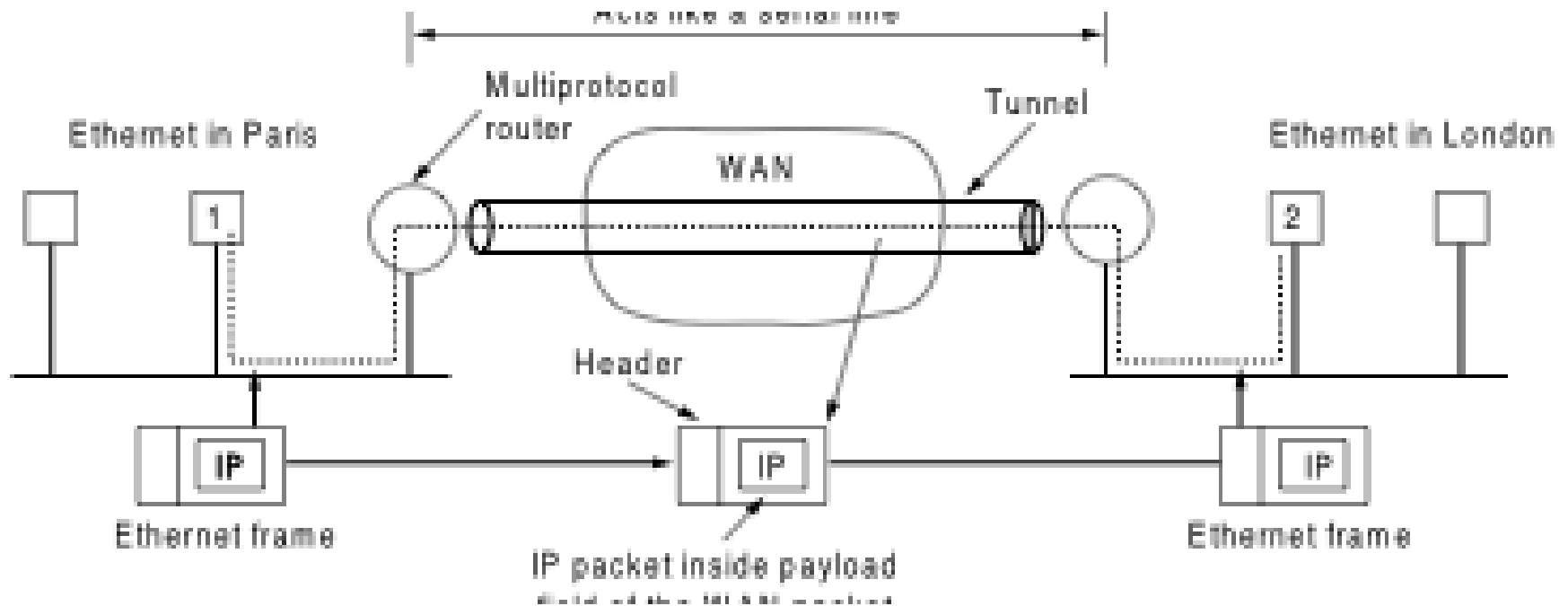
# Network Layer vs Datalink Layer

## Legend

- Header
- ▬ Packet
- Trailer

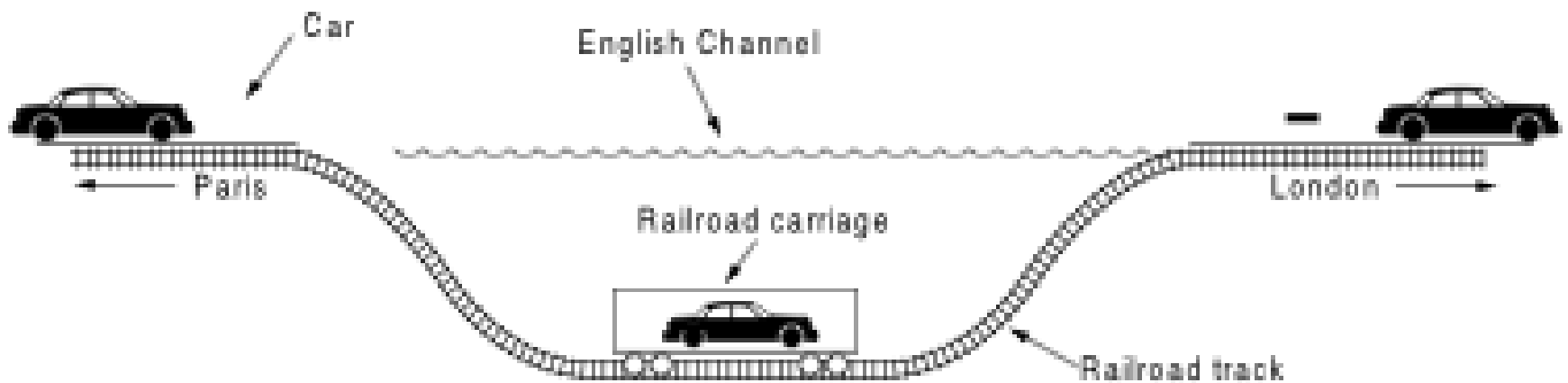


# Tunneling

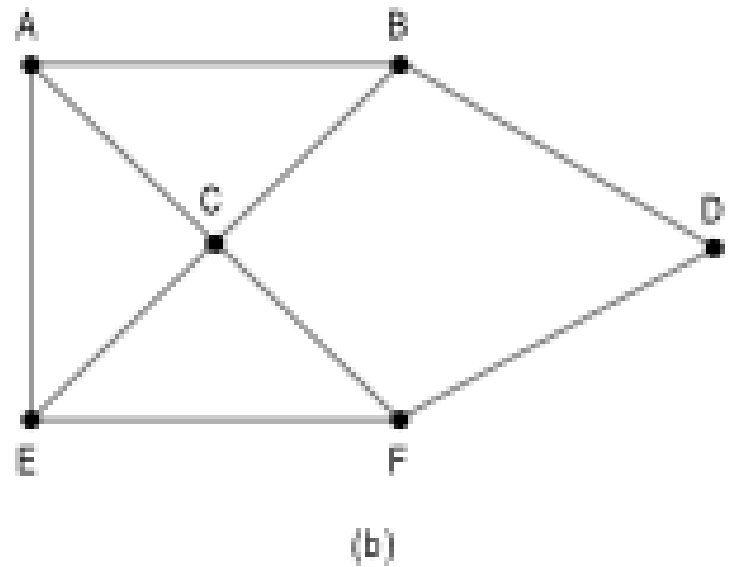
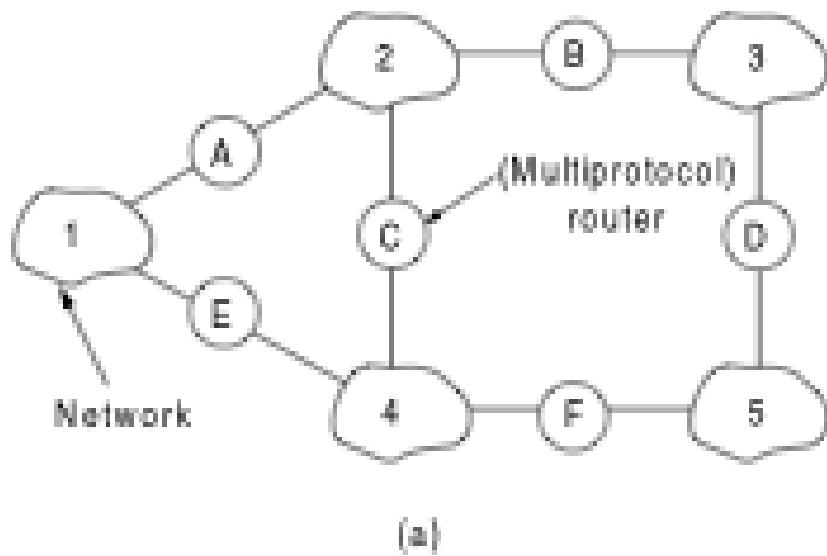




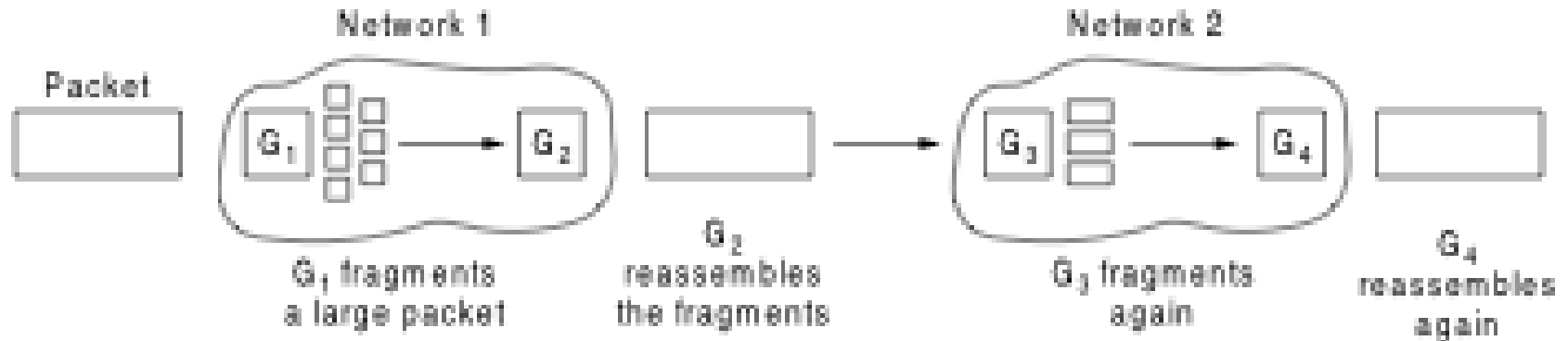
# Tunneling



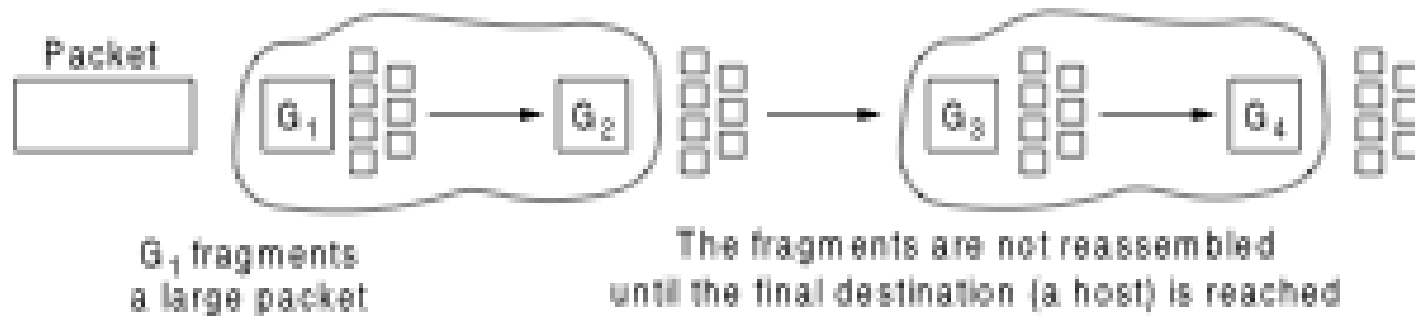
# Internetwork Routing



# Fragmentation



(a)



(b)