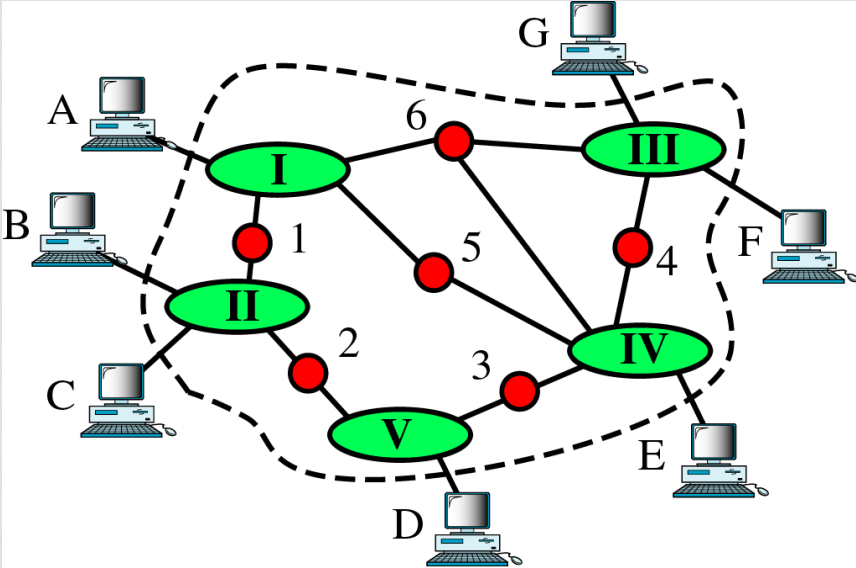
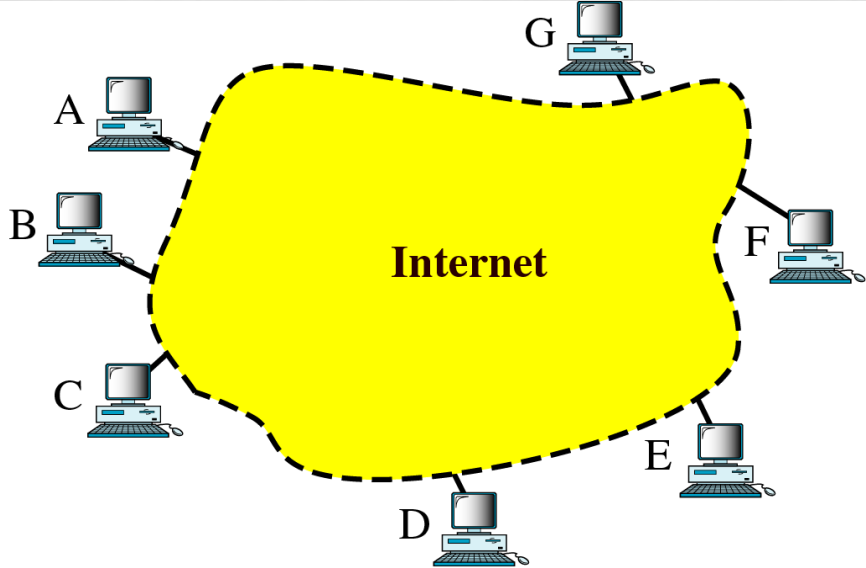


TCP/UDP

An Internet According to TCP/IP

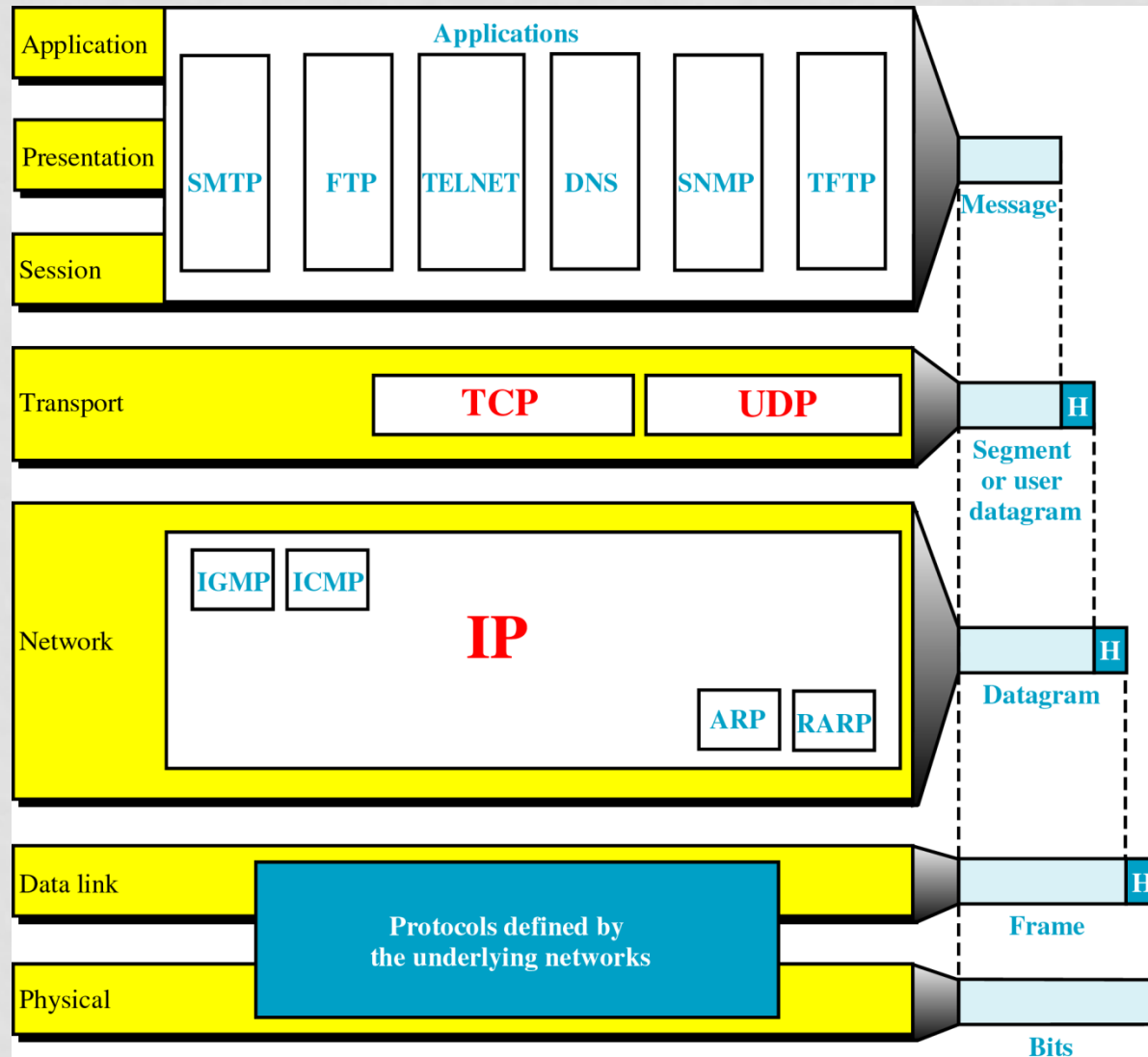


a. An actual internet

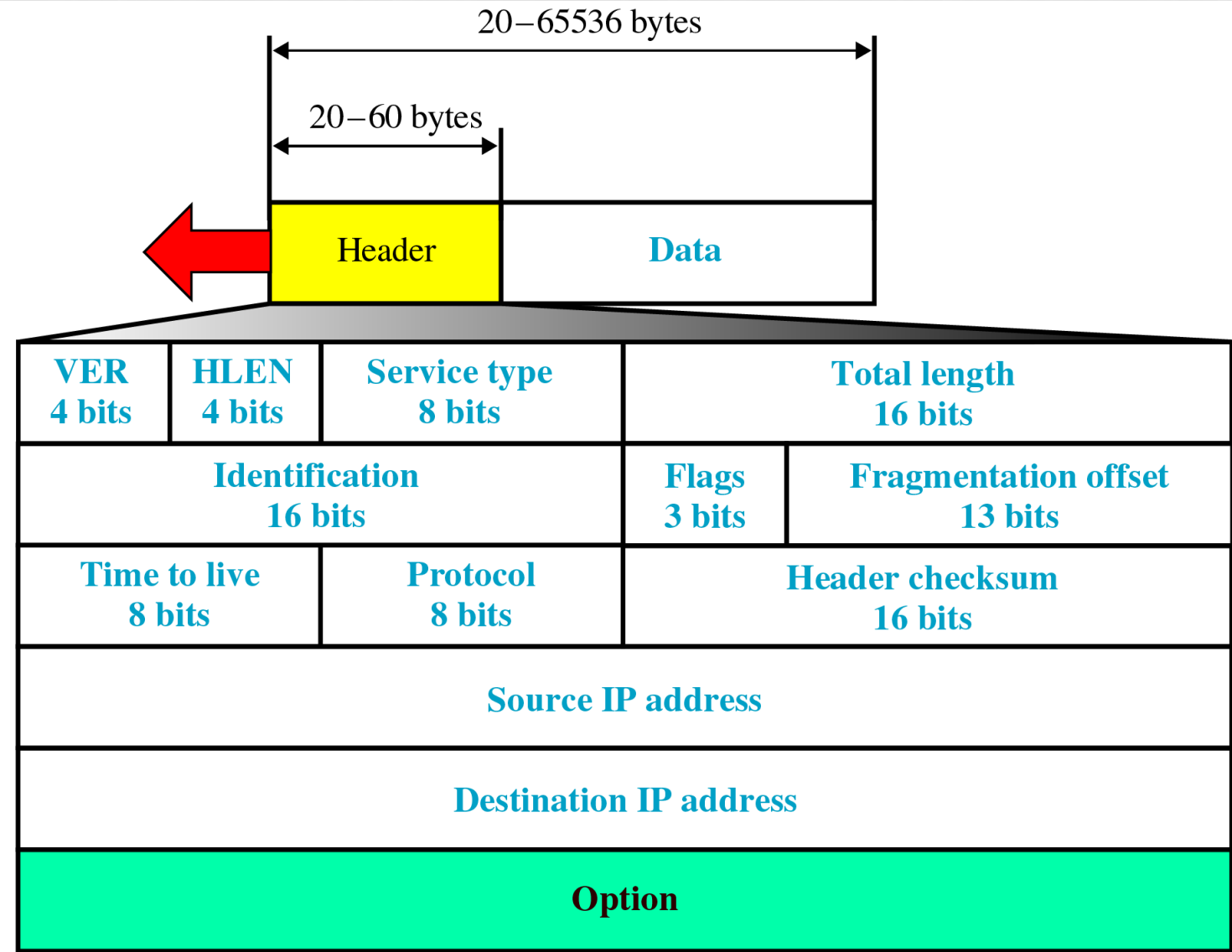


b. An internet seen by TCP/IP

TCP/IP and the OSI Model

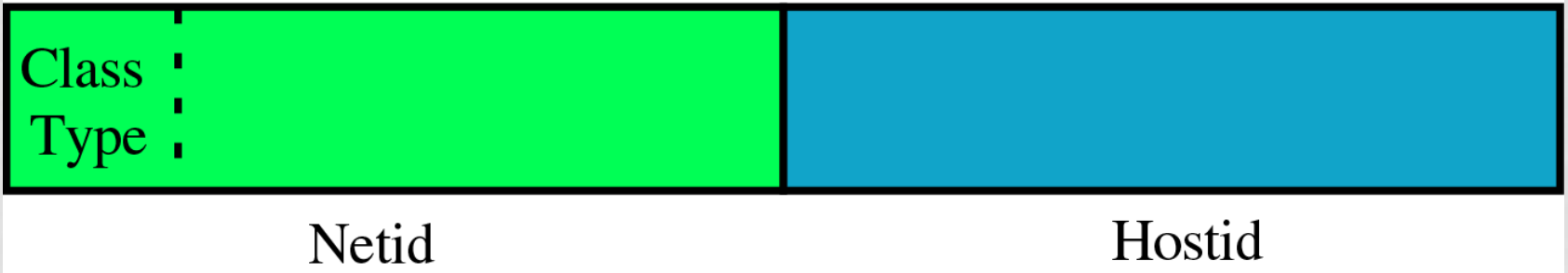


IP Datagram

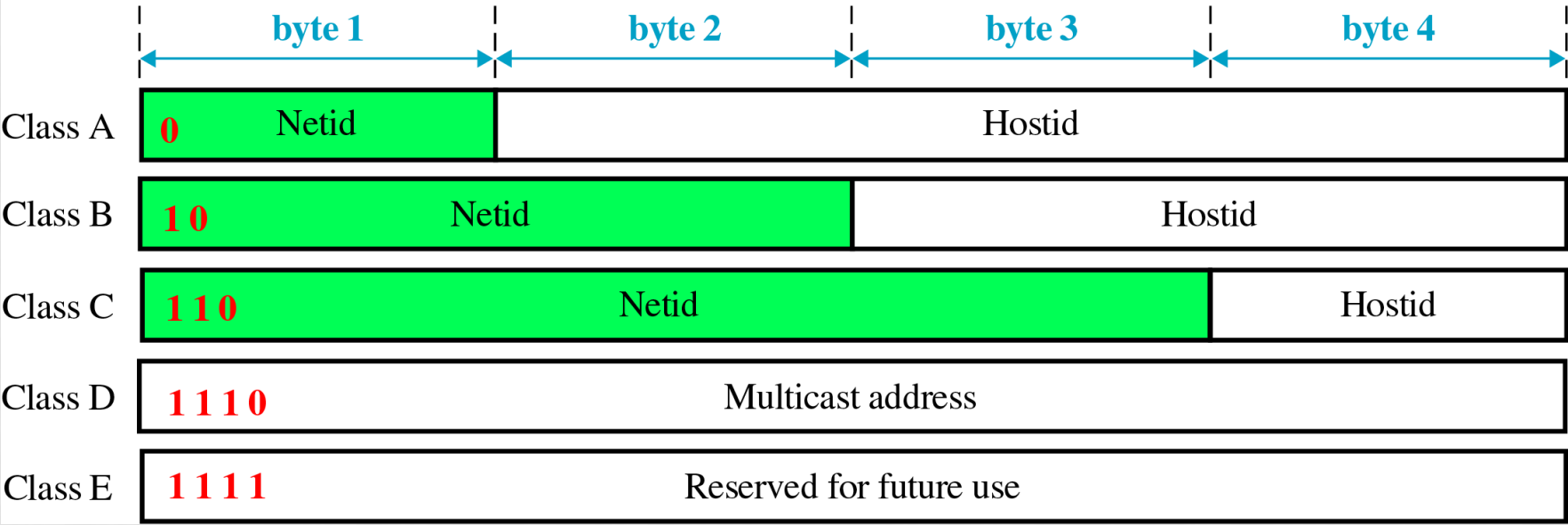


Internet Address

An Internet address is made of four bytes (32 bits) that define a host's connection to a network.



Internet Classes


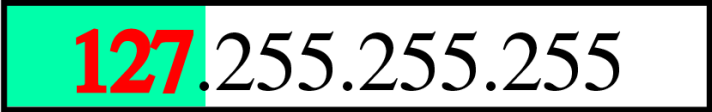

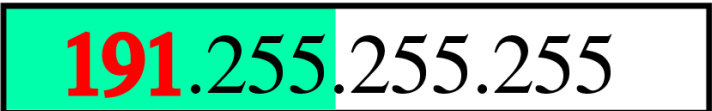

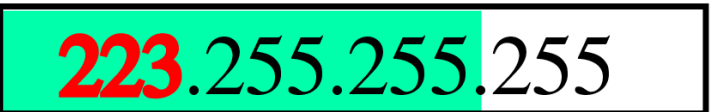

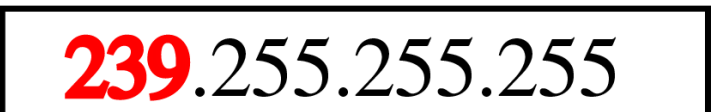

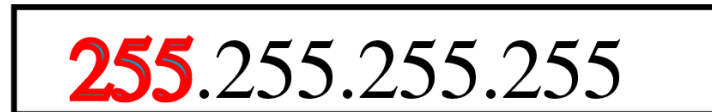


IP Addresses in Decimal Notation

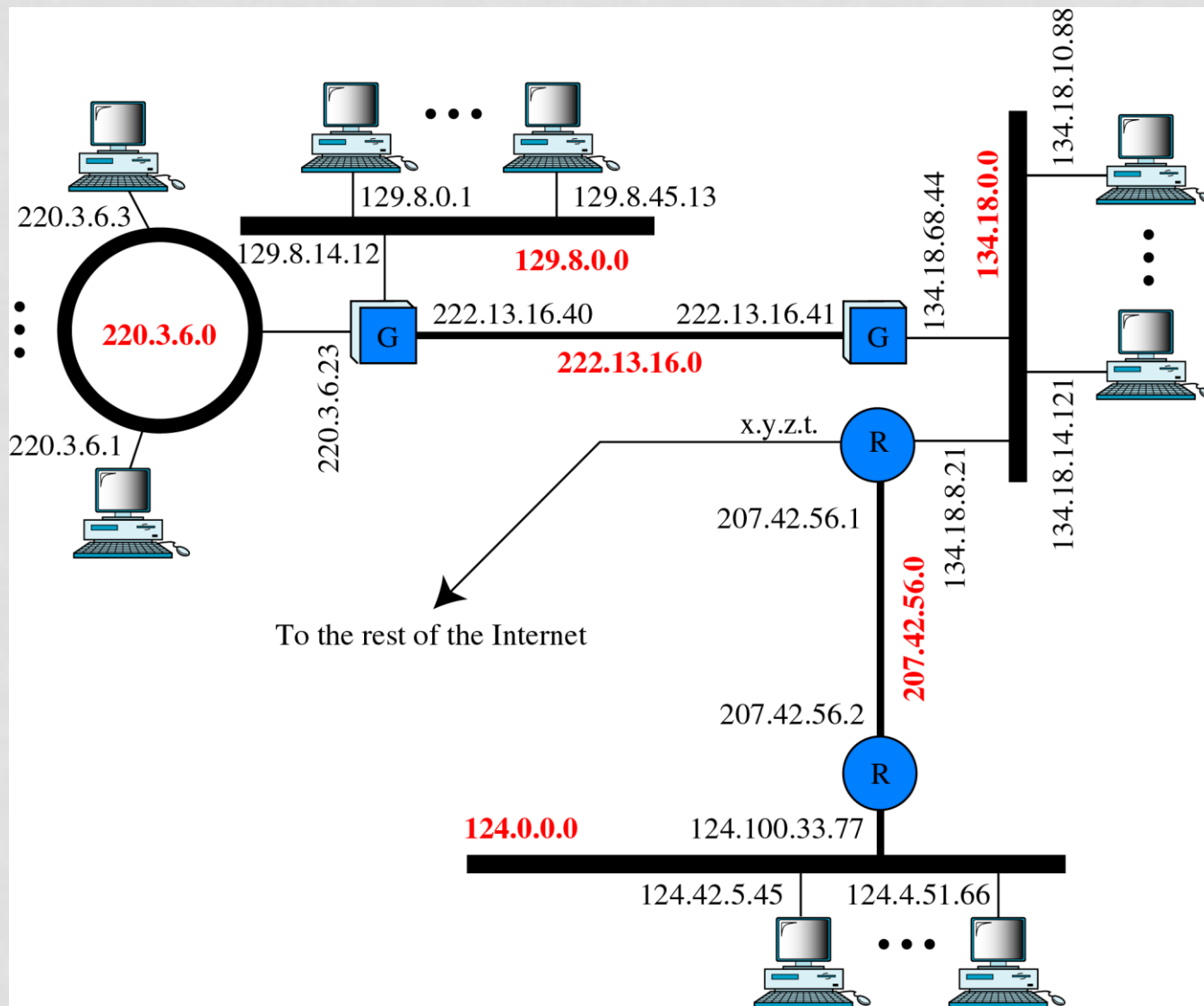
10000000 00001011 00000011 00011111

128.11.3.31

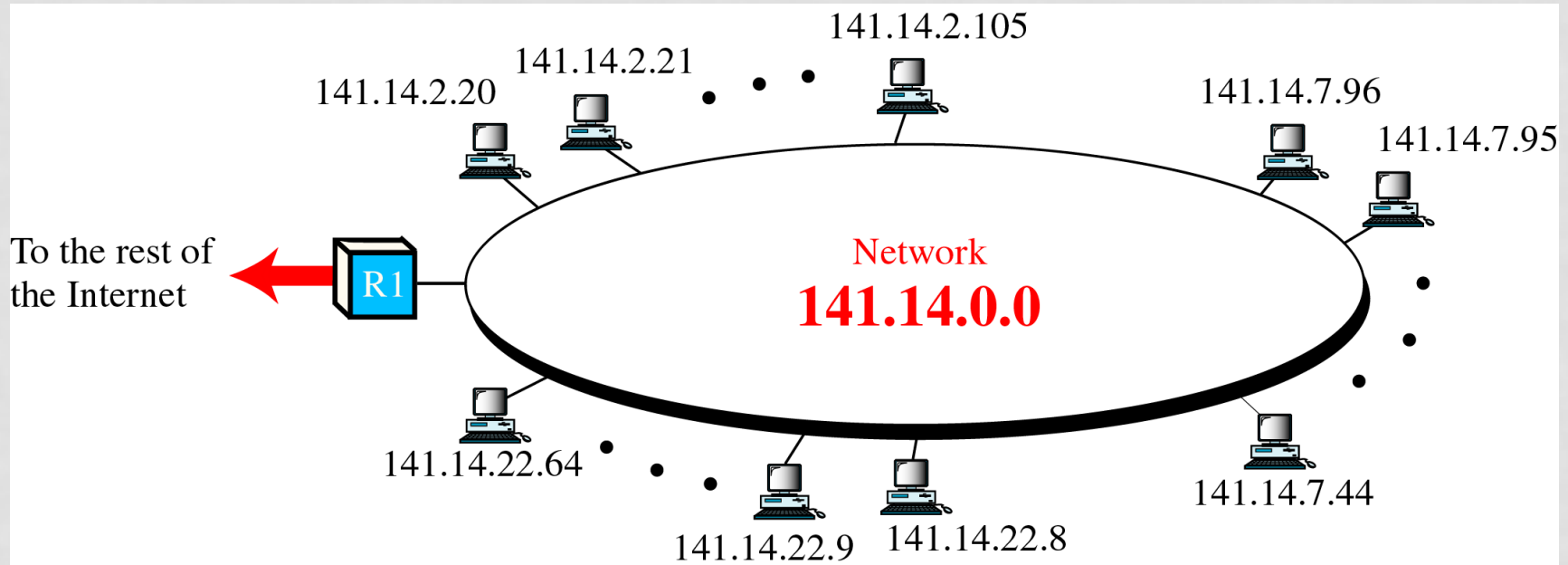
Class Ranges of Internet Addresses

	From	To
Class A	 Netid Hostid	 Netid Hostid
Class B	 Netid Hostid	 Netid Hostid
Class C	 Netid Hostid	 Netid Hostid
Class D	 Group address	 Group address
Class E	 Undefined	 Undefined

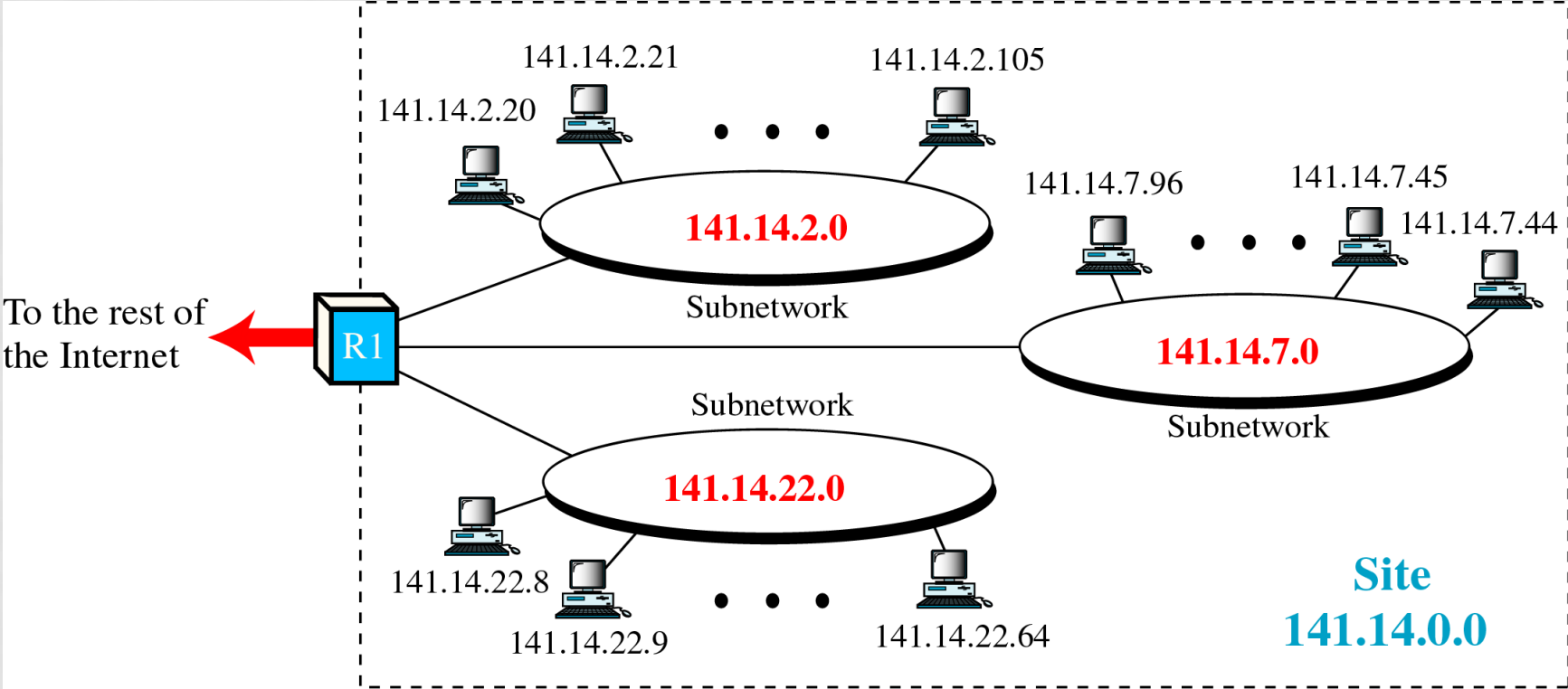
Network and Host Addresses



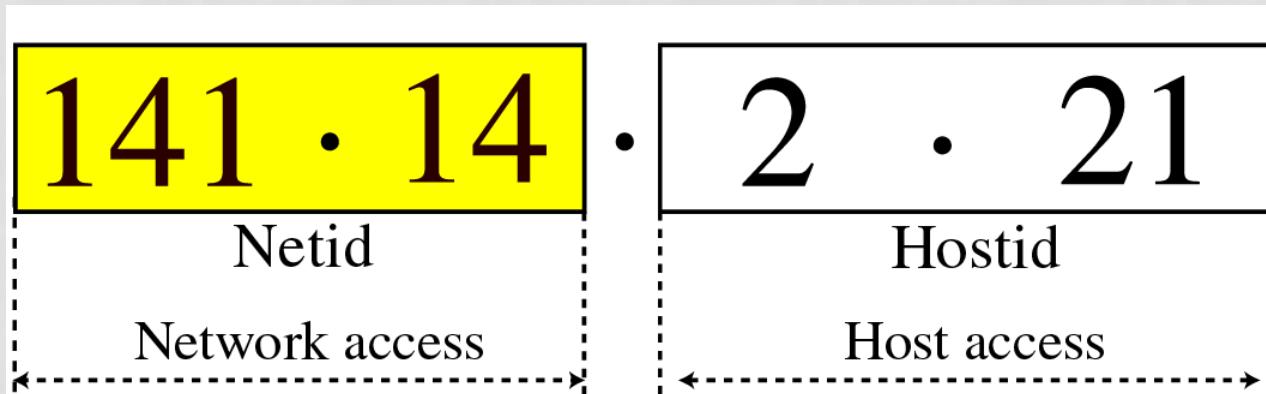
A Network with Two Levels of Hierarchy



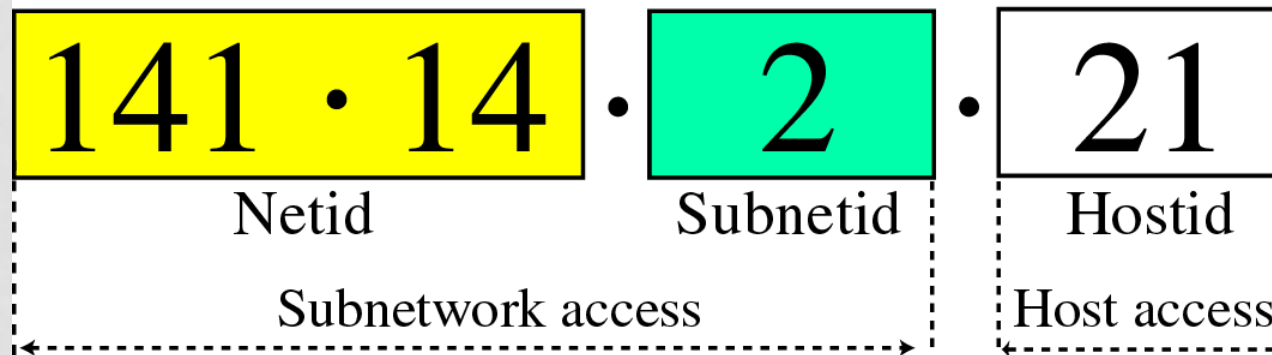
A Network with Three Levels of Hierarchy



Addresses with and without Subnetting

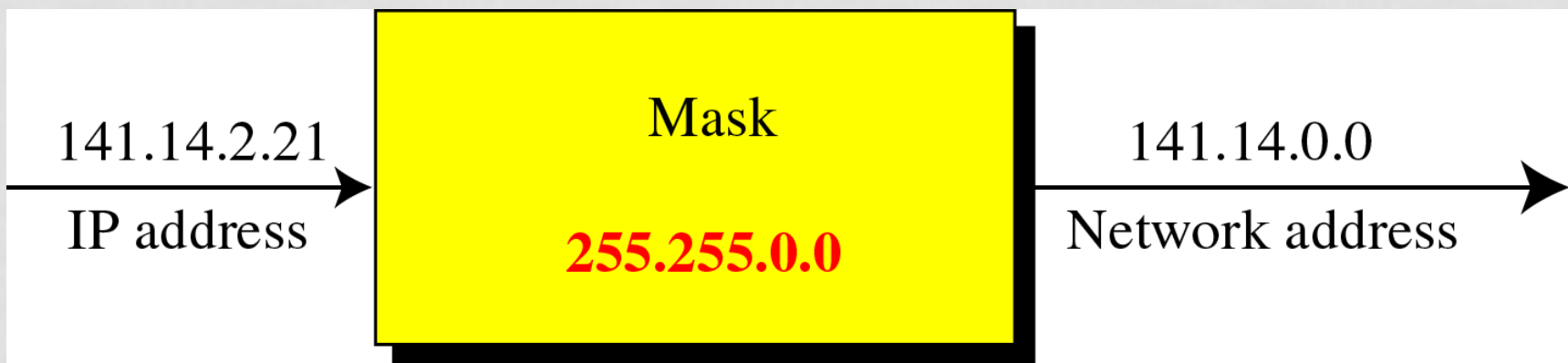


a. Without subnetting

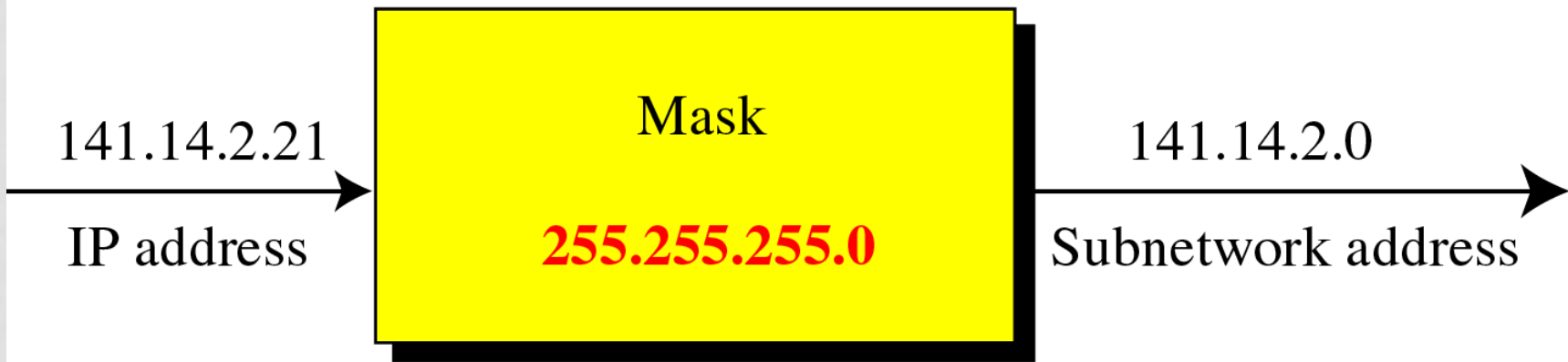


b. With subnetting

Masking

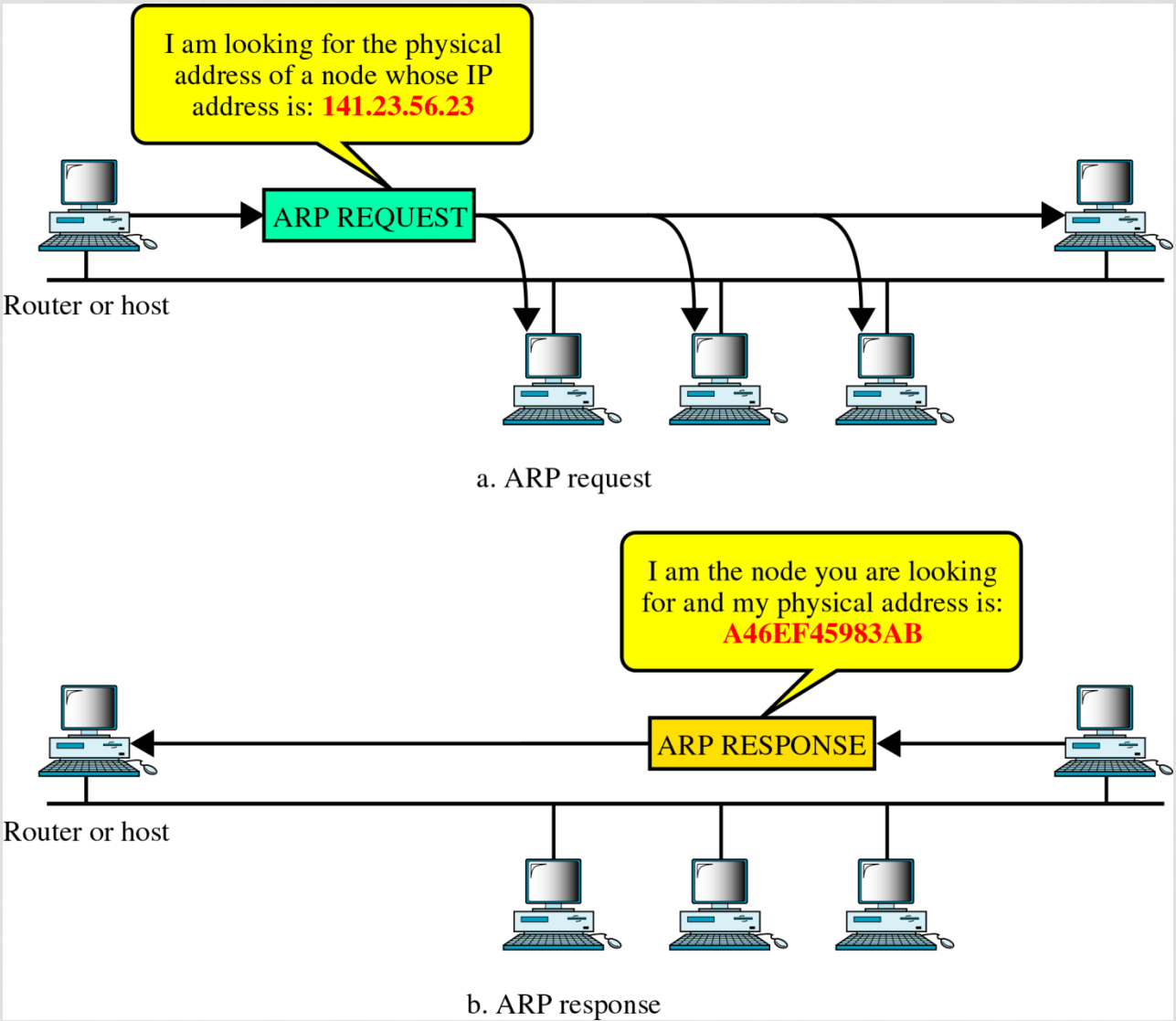


a. Without subnetting

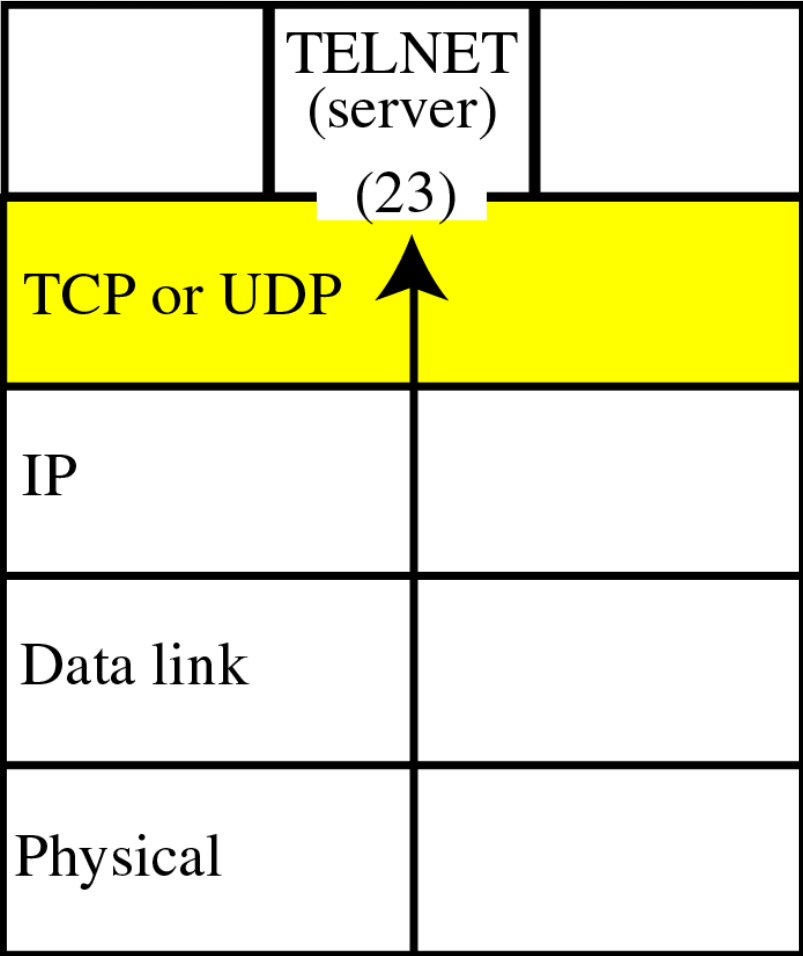
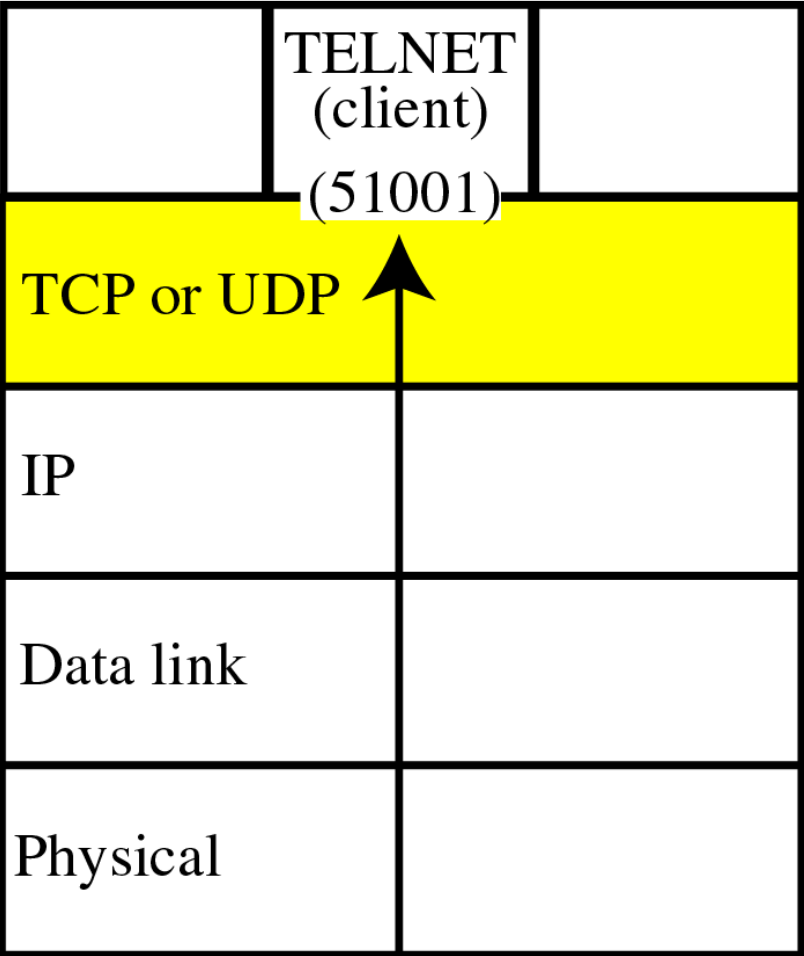


b. With subnetting

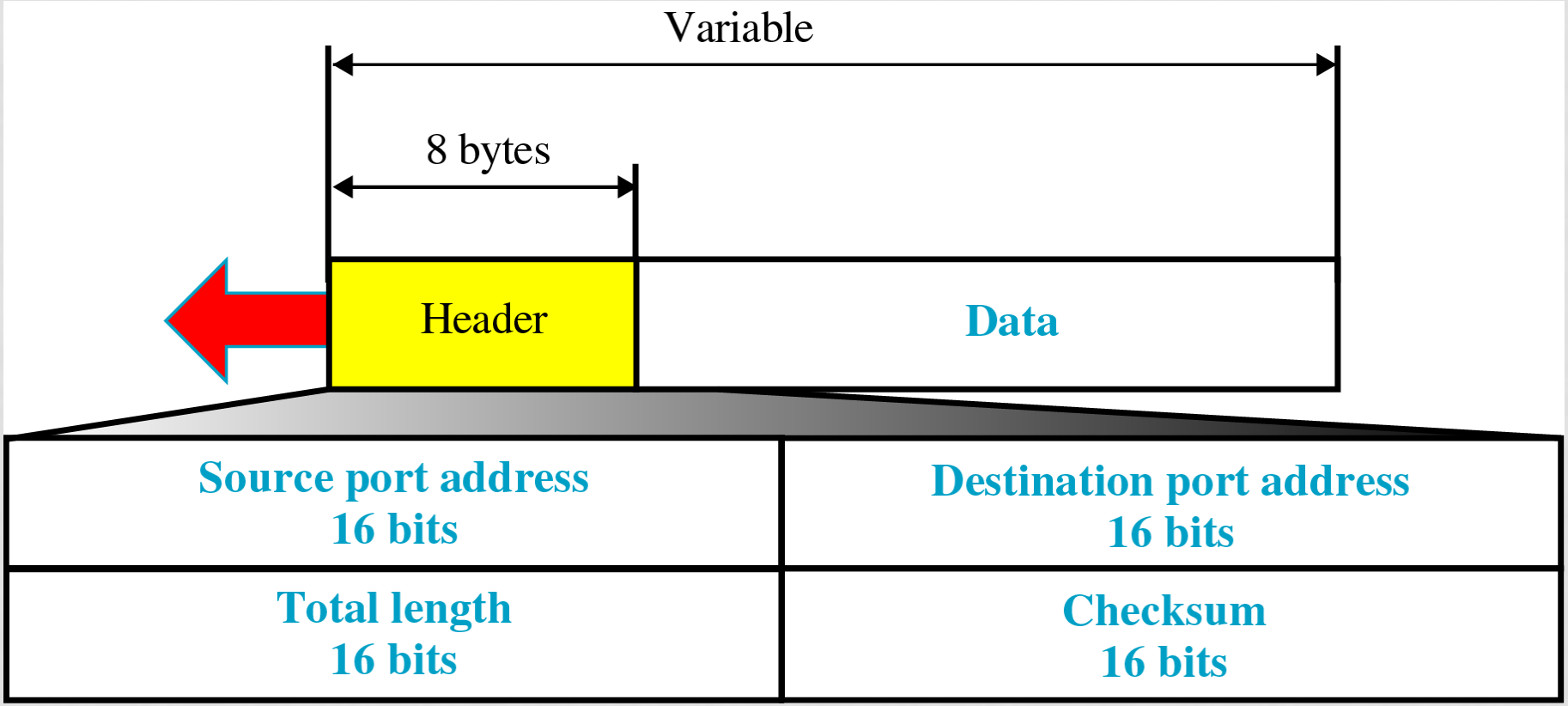
ARP



Port Addresses



UDP Datagram Format



TCP Segment Format

