The Network Layer !! workbo and con daments data sent has in martin Protocol: - IP Data Unit :- Datagram of and radies Sonder, One Ro Addressig: IP Address. IP Addresses: 32 bits (4 bytes) Dotted Decimal (0-256). (0-256). (0-256) IP Address (belong to the metroork), not to the (without two Your Iter Computer have different of Address when connected to different networks. Dynamic Host Configuration Protocol: when a new device is connected to the metwork, it is given a gramic IP to the & by this Protocol.

IP Datagrams 31 Total Length version header Flags Identification Header chatsur Protocol Source IP Address Destination IP Address. Options land three selects Network Layer Address Poschulier of bond la star Ethernet ! IP datagram tooter ethernet Header ARP Table

IP Addresses :-Network ID: Translated Host ID : 1 orale of street of 3 0/019 Address class System A way of defining how the global IP address space is split up. (16 Million) (126) last three octets HOST 2D (K8-191) ans B > first and outeto class = > first three od 410001049

protocol uned to discover the hardware andrew of anode with a certain IP address.

ARP Table (IPAddress -> MAC Address)

Sub Netting :-(32 bib) Sub Net Masks :part with o's last part parts with 1's first part * only part with 0's is available to give addresses.

TP -> 9.100.100.100 subnet mark -> 255.255.255.294 1111111 & ones | & 18 | 111 00000

27 is 508.

50, IP can be represented as 9.100.100/27

Routing: Network device that forwards traffic Router :depending on the destination address of 3 IP destination IP that traffic. Examines (Router) brude straffic to Re ceive Data packet destination. (Interior Gateway Protocols Routing Protocols: * Link state routing protos. A Distance vector routing protos. Used by routers to share information within Interior Gateway protocols: a single autonomous system. 1 scallection of networks fall under Control of Single network operator. Exterior Gateway protocols: b/w 2 autonomous Rystems.