

Review - Exam 1

Peter



What's this called? (two answers here)

1: ETHERNET

2: CAT5 Cable

What is it for? Physically connecting computers in a network

How fast does it go? Between 100 MB/sec and 1000 MB/sec, depending on the version

Note: CAT5 cannot go 1 TB/sec

What is a "class A" IP block? Who owns them?

IP addresses are A.B.C.D - class A refers to the 1st num

How many "class A" IP blocks are there?

256; 0 - 255

IP addresses that follow the pattern 18.x.x.x belong to what school?

MIT

140.247.x.x addresses belong to what?

Harvard

What is 802.11b?

A protocol for wireless data transfer; 11 Mbps

Which is faster, 802.11b or 802.11g?

802.11g, 54 Mbps

How do you pronounce Mbps?

Mega**BITS** per second

When you go to <http://www.google.com>, what protocols are involved?

HTTP

IP

TCP

DNS

DHCP

NAT

What are .org, .net, .com, etc?

Top Level Domains or TLDs

What does an ethernet cable jack look like?

A wider phone jack

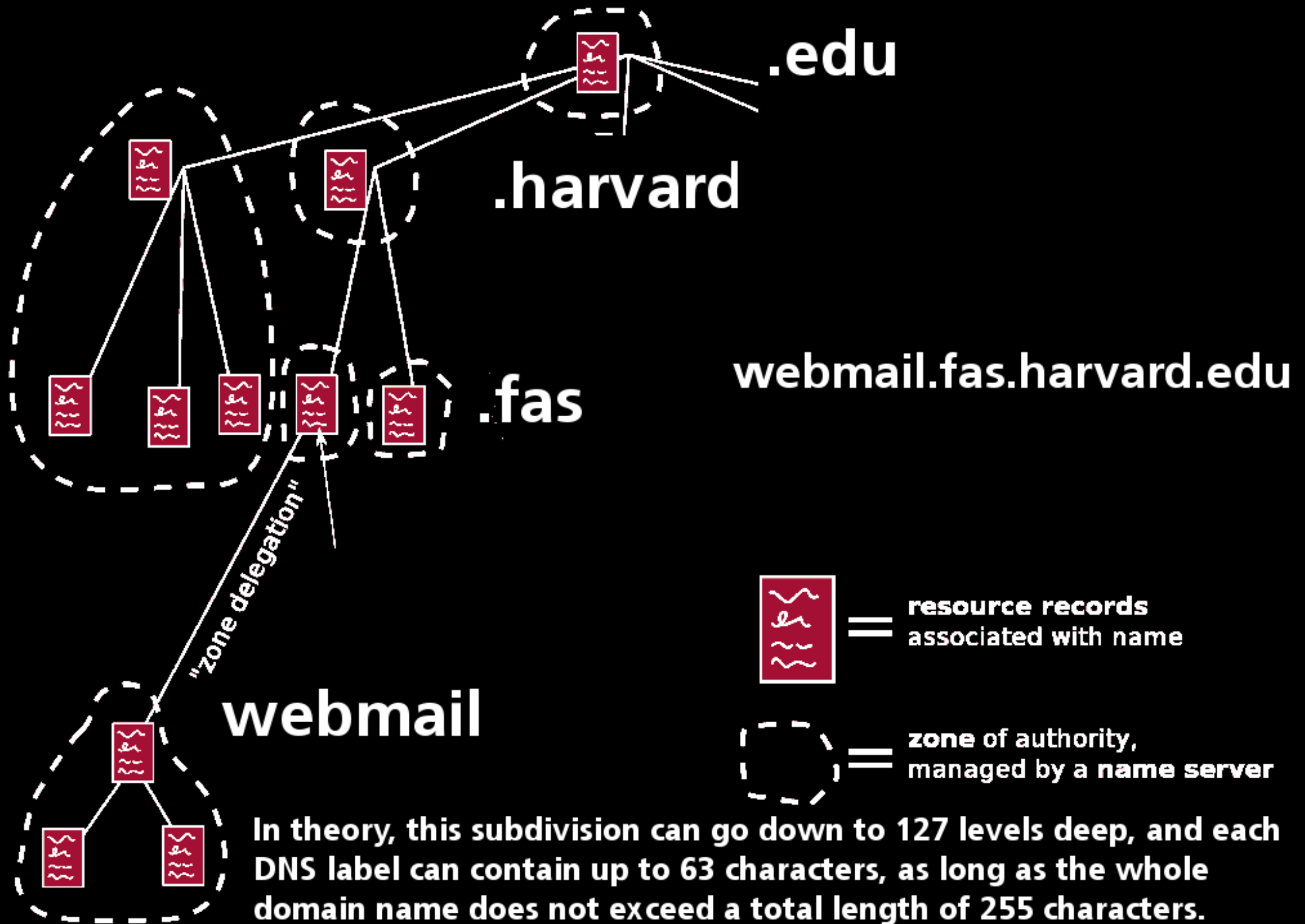
What funded the first internet?

Arpanet, part of the military

What are examples of domain names? What's the word for how they are turned into numbers/

www.google.com,
fas.harvard.edu

Domain Name Space



What port for HTTP?

80

*What port for
HTTPS?*

443

What is SMTP?

Email; port 25

*How many bits are in a
IPv4? How many are
possible?*

32 bits; 2^{32}
possible addresses
~ **4.3 billion**

What protocol gives your device an IP address on the network?

DHCP

What makes a valid email address?

a local part and a valid domain separated by an @

Does it use DNS when you send an email?

Yes, the DNS server's MX record indicates responsibility

Does the server for myname.us reside in the united states?

No, the TLD doesn't really tell you where the server is.

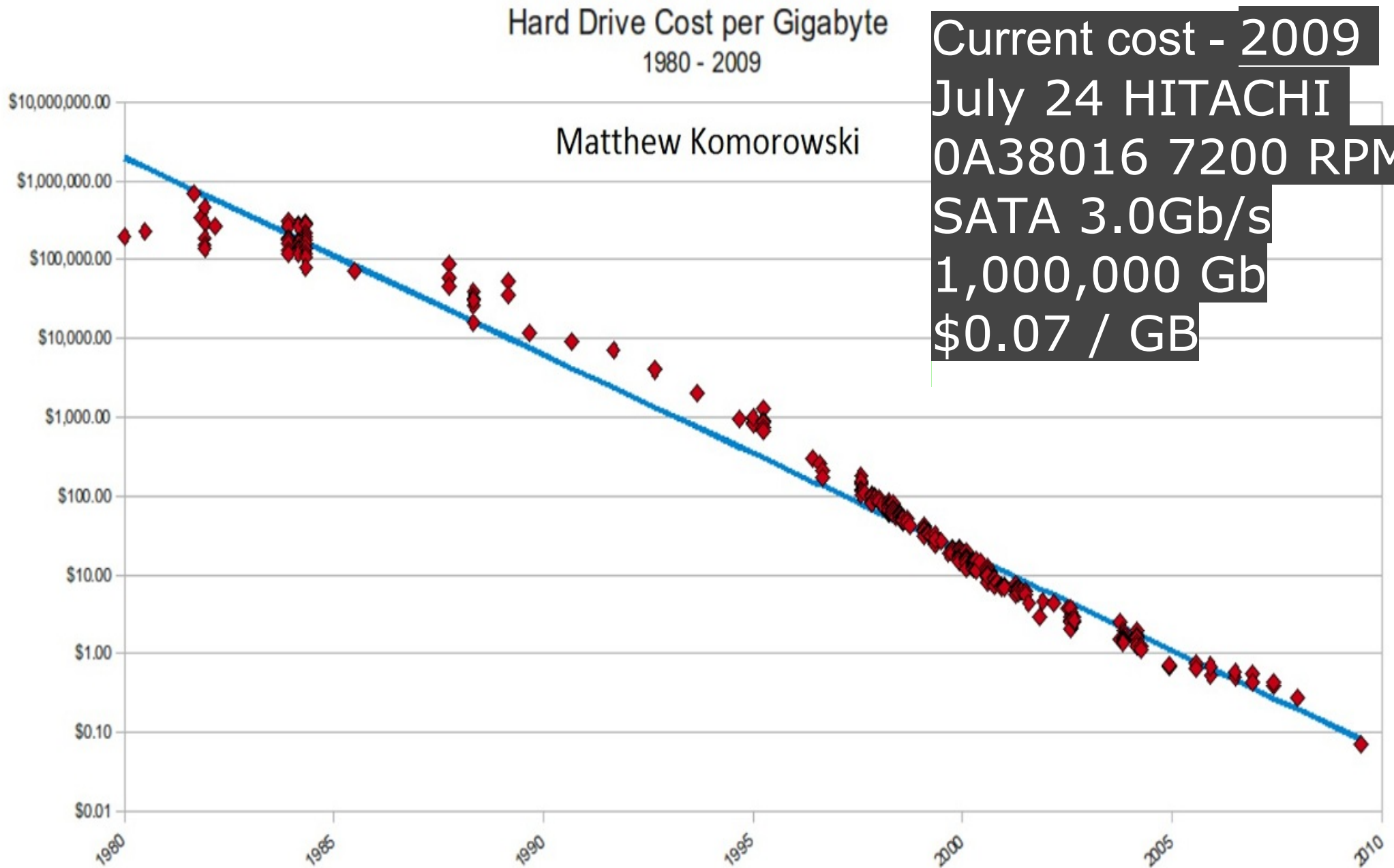
Who determines who can have .edu?

Management of most top-level domains is delegated to responsible organizations by the Internet Corporation for Assigned Names and Numbers (ICANN), which operates the Internet Assigned Numbers Authority (IANA) and is in charge of maintaining the DNS root zone.

What is a subnet mask for?

It's so a router can know whether a certain address is outside of the current network - then it can send it along

How much does hard drive space cost



What is a switch for?

Connecting two
computers on your
local network

*What is an access
point like*

A hub - they both broadcast all
of their traffic to all machines
on the network

*What do local ips
look like?*

10.x.x.x

172.16.x.x to 172.31.x.x

192.168.x.x

*What technology
translates private IP
addresses to public
IP?*

NAT - network address translation

What is VPN?

A secure connection between your computer and another computer that lets you look like your are a computer on that network

*What does
"10baseT" and
100baseT refer to?*

ethernet traffic speeds.

10base T - 10 Mbps

100base T - 100 Mbps

1000base T - 1000 Mbps

What are some symbols that
aren't allowed in Domain Names?

you **can't** use symbols
(such as ' + . , | ! " £ \$ %
& / () = ? ^ * ¢ ° § ; : _ >]
[@);