

CIS 375

COMPUTER NETWORKING

AND TELECOMMUNICATIONS

Dr. Mahaney



Background

- Name:
- Major:
- Planned Graduation Date:
- High School Attended:
- Career Goals:
- Dream Job:



Binary Numbers

- The binary number 0100 means 4, and the binary number 1000 means 8.
- What does the binary number 1100 mean?
- What is the binary number that means 6?



Search Engines

- List 3 search engines.
 - 1)
 - 2)
 - 3)



Social Media

- What is your favorite social media site?



Browsing

- What is a cookie?
- How can you know whether a website uses encryption?



Addressing

- In Windows, what will happen when the user types CTRL + ALT + DEL ?
- Provide an example (real or fake) of an IP address:
- What is an IP address used for?
- What is a MAC address?



Telecommunication

- Who invented the telephone?
- What year was the telephone invented?



OSI 7-Layer Model

- List the layers of the 7-layer OSI model.
- 7)
- 6)
- 5)
- 4)
- 3)
- 2)
- 1)



Linux / Unix

- What is a popular version of Linux?
- What is your favorite version of Linux?



PC

- Does your personal computer run Windows or Mac?
- Which version of the operating system does your personal computer run?
- What is the Windows command to display an IP Address?
- What is the Unix/Linux/Mac command to display an IP Address?



Background

- Dr. Robert C. Mahaney, Ph.D.
- Morehead State University (1984)
 - Math and Computer Programming
- AT&T Communications
 - COBOL Programming
- Blue Cross and Blue Shield of Kentucky
 - Programmer/Analyst; LAN Administrator; Data Administration
- University of Kentucky
 - Masters in Mathematics (1995)
 - PhD in Information Systems (2000)



Teaching

- Ivy Tech – Indiana
- University of Kentucky – Math and IS
- Midway College
- Sullivan University
- Northern Kentucky University
- Eastern Kentucky University



Syllabus

- Learning Objectives
- Textbook
- Grading Criteria
- Semester Schedule
- Important Dates
- Computer Lab Assignments
 - BTC 131 – Computer Forensics Lab



Binary Numbers

- 0001
- 0010
- 0011
- 0101
- 0110
- 0111
- 1000
- 1000000000000000



Binary Numbers

- $0001 = 1$
- $0010 = 2$
- $0011 = 3$
- $0101 = 5$
- $0110 = 6$
- $0111 = 7$
- $1000 = 8$
- $10000000000000 = 2^{12} = 4096$



Terms

- Bit
- Byte
- Octal
- Hexadecimal
- kbs
- MB
- Kilo, Mega, Giga, Tera, etc.



Review this text file:

- Binary Numbers and Hexadecimal Number



Abbreviated Glossary

- Internet
- www
- Intranet
- ISP
- LAN
- Server
- Client
- Workstation
- Node
- Domain
- Protocol
- ANSI
- Backbone
- Repeater
- Hub
- Switch
- Router



Abbreviated Glossary

- Hertz
- Firewall
- IPv4
- IPv6
- NIC
- IEEE
- Apache
- Linux
- Open Source Software
- Archive bit
- HTTP
- HTML
- TCP/IP

