

COS116 Sample Lab Review Qs

May 6th 2011

1. Circuits: Write the truth table for the majority of 4 function and circle the correct Boolean expression.

A) $ABC\bar{D} + AB\bar{C}D + A\bar{B}CD + \bar{A}BCD$

B) $ABC + ABD + ACD + BCD$

C) $ABCD + \bar{D} + \bar{C} + \bar{B} + \bar{A}$

2. Circuits: Which of the following additions can be done without overflow using a 4 bit adder?

A) $4+4$

B) $9+7$

C) $8+8$

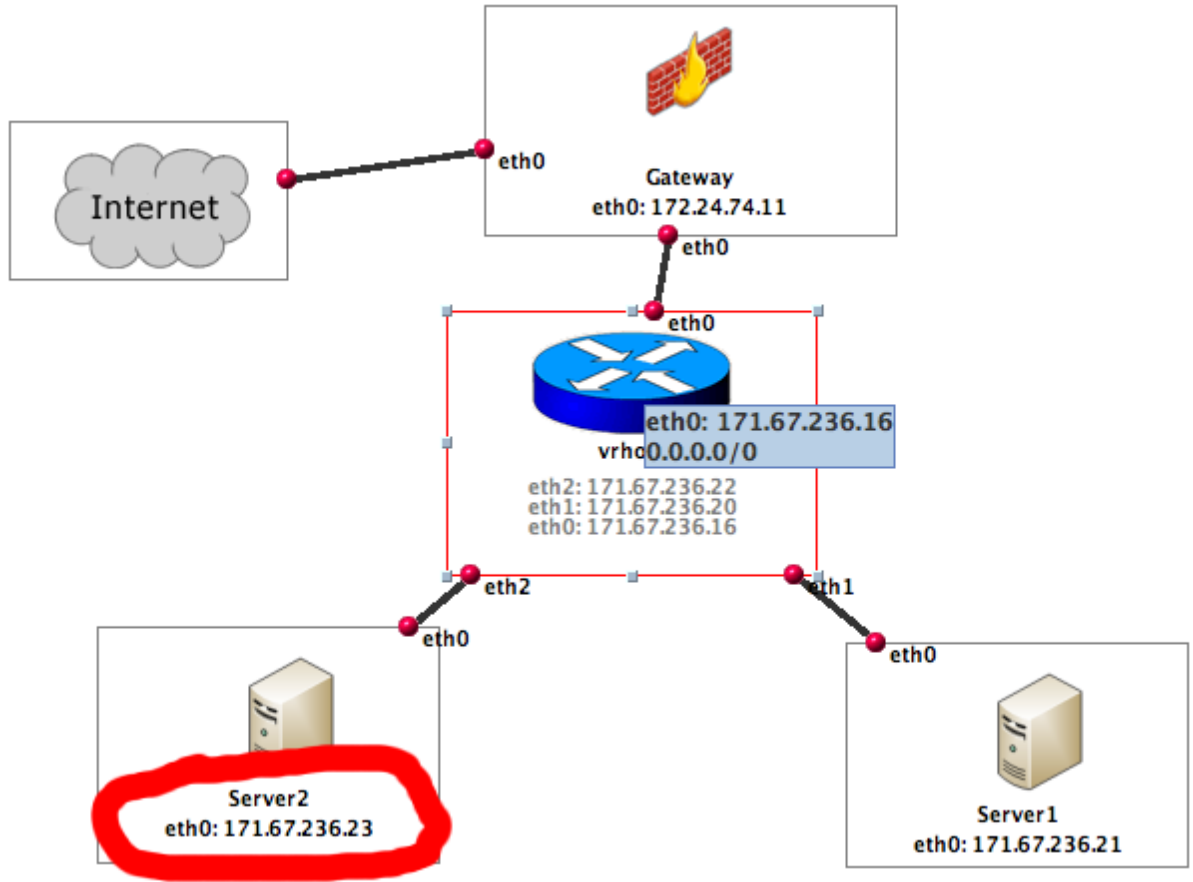
D) $7+8$

3. Viruses and Worms: Label each of the following with “virus” or “worm”, whichever is the better match.

- often travels through email
- exploits security vulnerabilities in the system
- spreads fast
- exploits buffer overflow

4. UDP and TCP: Label each of the following with “UDP” or “TCP”, whichever is the better match.

- guarantees delivery of packets
- mostly used for streaming applications
- higher overhead



5. Graphics: Label each of the following with either “true” or “false”.

- RGB values describe how much red, green or black light is reflected by a pigment. _____
- A 3D rectangle with eight vertices can be created using just 12 triangles. _____
- Increasing the specularity of an object will cause it to appear duller. _____
- A raytracer works by projecting 3D triangles onto a 2D space through transformations. _____