

Due in class on Tuesday, November 20th, 2001

Please be sure to show all your work and write down any assumptions you make.

1. Routing tables (10 points):
Problem 4.29 from Peterson and Davie, 2nd edition.
2. Subnetting (10 points):
Problem 4.32 from Peterson and Davie, 2nd edition.
3. TCP (15 points):
Problem 5.20 from Peterson and Davie, 2nd edition.
4. Congestion Control (15 points):
Problem 6.39 from Peterson and Davie, 2nd edition.
5. Congestion Avoidance (10 points):
Problem 6.34 from Peterson and Davie, 2nd edition.
6. Presentation Formatting (XDR) (25 points):
Problems 7.1 and 7.2 from Peterson and Davie, 2nd edition. Run and measure the time taken by the routine as well (you will have to perform several iterations in order to get a measurable time).
7. RSA (15 points):
Using the RSA public key cryptosystem, with $a = 1, b = 2$, etc., and an RSA key set with $p = 5$, $q = 11$, and $d = 27$, find e and encrypt $abcdefghij$.