Homework 6

Important Note: For this homework, no late submissions please.

The following problems are from K & R Chapter 5.

Problem 1 (10 points). P3 (in both the 8th and 7th edition)
Problem 2 (10 points). P5 (in both the 8th and 7th edition)

Problem 3 (10 points). P6 (in both the 8th and 7th edition)
Note: Assume the only information the nodes initially have is the cost to their nearest neighbors. The intention is to find the number of iterations from when the algorithm is run for the first time.

Problem 4 (10 points). P11 (in both the 8th and 7th edition)
Problem 5 (5 points). P14 (in both the 8th and 7th edition)
Problem 6 (5 points). P15 (in both the 8th and 7th edition)
Problem 7 (5 points). P17 (in both the 8th and 7th edition)

The following problems are from K & R Chapter 6.

Problem 8 (10 points). P10 (in both the 8th and 7th edition)
Problem 9 (10 points). P15 (in both the 8th and 7th edition)
Problem 10 (10 points). P16 (in both the 8th and 7th edition)

Problem 11 (5 points). P19 (in both the 8th and 7th edition)
Note: For this problem, please do some Internet search about some additional details of CSMA/CD. In particular, please include the jam signal duration, which is 48-bit time, and the interframe spacing, which is 96-bit time. For the latter, the channel must be sensed to be idle for 96-bit time before the node can starts transmitting a frame.

Problem 12 (10 points). P31 (in both the 8th and 7th edition)