

# EECS 122: Homework 4

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## Question 1:

Kurose and Ross Chapter 4: Problem 4.

## Question 2:

Kurose and Ross Chapter 4: Problem 12.

## Question 3:

In Kurose and Ross Chapter 4: Problem 21, we route using the metrics given in the graph as a link cost. Now, consider the same metrics to be the bandwidth of the links and find the widest (Max Bandwidth) path from  $x$  to all network nodes.

## Question 4:

Kurose and Ross Chapter 4: Problem 25.

## Question 5:

**Knockout Switch:** For an  $N \times N$  switch with a fixed value of  $L$  (refer the slides for a description of  $N$  and  $L$ ), find the number of switching elements as a function of  $N$ ?