

Tutorial 7 Solution

Question 1

Use larger buffers at input ports.

Use switching fabric at rate at least n times as fast as the input line speed, where n is the number of input ports.

Question 2

Assuming input and output line speeds are the same, packet loss can still occur if the rate at which packets arrive to a single output port exceeds the line speed.

Question 3

(a)

Prefix match	Link interface
11100000 00	0
11100000 01000000	1
1110000	2
11100001 1	3
otherwise	3

(b)

Link interface 3
Link interface 2
Link interface 3

Question 4

(a)

4

(b)

0, 85, 170, 255