

## **Tutorial 10 Solution**

### Question 1

$$10 \times 10^6 / (1500 \times 8) \times 0.184 = 153 \text{ frames/sec}$$

### Question 2

$$306 \text{ frames/sec}$$

### Question 3

$$0.184 = 1 / (1 + (6.44 \times d \times 10^9 / (12,000 \times 3 \times 10^8)))$$

$$d = 2.5 \text{ Km}$$

wide area network

### Question 4

$$0.368 = 1 / (1 + (6.44 \times d \times 10^9 / (512 \times 3 \times 10^8)))$$

$$d = 41 \text{ m}$$

local area network