CS 372 Introduction to Computer Networks
Self-Check Exercises: Lecture 30

1) What is the purpose of IP fragmentation?

2) What is an MTU? What is a *path MTU*?

3) Is the header of the original IP datagram included in the *payload* of fragmented datagrams?

4) If it is a TCP segment which has been fragmented (with header length = 20 bytes), where does the TCP header go?

5) How does the ID field of the IP datagram change from Fragment #1 to Fragment #N?

6) Where does reassembly of fragmented datagrams take place?

7) What happens if an IP datagram is fragmented into N datagrams, but the destination only receives the first 1 … N-1 fragmented datagrams?

8) Can a fragmented IP datagram be re-fragmented?

9) A 2400-byte datagram (with ID #422) encounters a router with an MTU of 700 bytes. The *don't-fragment* flag is set to 0

   a. How many fragments are generated?

      For each fragment, show the values in the following header fields:

      - *Length*

      - *ID#*

      - *more-fragments* flag

      - *offset*