



## Learning Guide Unit 7

### Written Assignment

Answer the following in your own words.

1. Why does the maximum packet lifetime have to be large enough to ensure that not only the packet but also its acknowledgments have disappeared?
2. Give one potential disadvantage when Nagle's algorithm is used on a badly congested network.
3. Give two examples of cases where TCP sends data-less packets on an established connection (which is not being torn down).
4. Exercise 5.0 from section 12.24 of the textbook:
  1. Suppose you see multiple TCP connections on your workstation in state FIN\_WAIT\_1. What is likely going on? Whose fault is it?
  2. What might be going on if you see connections languishing in state FIN\_WAIT\_2?

### Paper Guidelines

2-3 pages in length, in your own words, properly cite any outside resources. Use 1" margins and Times Roman Font, 12-point, or something comparable. The paper should be well organized with proper grammar and spelling.

Be sure to properly cite any sources you use using APA format. You can get some help on APA formatting here: Purdue Online Writing Lab. (n.d.). *APA style introduction*. Purdue University. [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_style\\_introduction.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html)

### Assessment Criteria

- Answers all of the questions posed in the assignment (50%)
- Paper Organization (20%)
- Vocabulary (10%)
- Grammar (10%)
- Spelling and Punctuation (10%)

