1. **Explain the two work arounds that were created specifically to extend the life of IPv4.**
2. ??
3. ??
4. **Explain the primary purpose for using VLSM subnetting.**

??

1. **Briefly explain how MAC addresses, IP addresses, and Port Numbers are used in a TCP/IP network.**
2. MAC =
3. IP Address =
4. Port Number =
5. **Explain the two primary benefits for breaking data into segments, packets, and frames and transmitting frames one at a time.**
6. ??
7. ??
8. **What is the difference between classful and classless IPv4?**

??

1. **What criteria do software engineers use to determine if they should use TCP or UDP?**

??

1. **What are the three primary benefits IPv6 has over IPv4?**
2. ??
3. ??
4. ??
5. **Name three properties of a network architecture (i.e. Ethernet, ATM, SONET, etc.)?**
6. ??
7. ??
8. ??
9. **Open a Command Prompt window and ping** [**www.google.com**](http://www.google.com)**. Explain what your computer did trying to ping to** [**www.google.com**](http://www.google.com) **(explain process steps. i.e. step#1, step#2, step#3, etc.).**

Step-1 = ??

Step-2 = ??

Step-3 = ??

Etc.

1. **Explain what your computer does when it’s configured for dynamic IPv4 and you connect to a Wireless Access Point (WAP) at your favorite coffee shop or home (explain process steps. i.e. step#1, step#2, step#3, etc.).**

Step-1 = ??

Step-2 = ??

Step-3 = ??

Etc.