

### Homework 21

**PROBLEM #1:**

Summarize what you know at this point about firewalls. What points or questions would you like to discuss further?

**SOLUTION:**

Firewalls block network traffic according to rules that the administrator has defined. Traffic that is defined as bad is blocked, the packets do not progress past the firewall, good traffic is allowed to pass through. Firewalls can be placed in many locations, at the network edge, just before end nodes, and between secure and insecure networks. The placement and configuration of a firewall are critical in the safety of the network.

PROBLEM #2:

Prepare a one-paragraph objective summary of the main ideas in this chapter (Chapter 9).

SOLUTION:

(See firewall summary above)

Intrusion prevention systems add even more security on top of firewalls by monitoring traffic for abnormalities through protocol, statistical, or traffic anomalies, or pattern and stateful matching. When an anomaly is detected, the traffic is flagged with where it came from, where it was going to, and what it was trying to do to give the administrator(s) a way to document and defend against attacks in the future.