☑ Exercise 1

Read the following text and then answer the follow-up questions.

What is firewall?

A firewall is simply a program or hardware device that filters the information coming through the internet connection into your private network or computer system. If an incoming packet of information is flagged by the filters, it is not allowed through. Let's say that you work at a company with 500 employees. The company will therefore have hundreds of computers that all have network cards connecting them together. In addition, the company will have one or more connection to the internet through something like T1 or T3 lines (T1 and T3 are two common types of leased lines used in telecommunications).

Without a firewall in place, all of these hundreds of computers are directly accessible to anyone on the internet. A person who knows what he or she is doing can probe those computers, try to make File Transfer Protocol (FTP) connections to them, try to make Telnet connections (Telnet is a network protocol used on the Internet or local area networks to provide a bidirectional interactive text-oriented communication facility) to them and so on. If one employee makes a mistake and leaves a security hole, hackers can get to the machine and exploit the hole. With a firewall in place, the landscape is much different.

A company will place a firewall at every connection to the internet (for example, at every T1 line coming into the company). The firewall can implement security rules. For example, one of the security rules inside the company must be:

Out of the 500 computers inside this company, only one of them is permitted to receive public FTP traffic. Allow FTP connections only to that one computer and prevent them on all others.

A company can set up rules like this for FTP servers, Web servers, Telnet servers and so on. In addition, the company can control how employees connect to Web sites, whether files are allowed to leave the company over the network and so on. A firewall gives a company tremendous control over how people use the network.

Questions:

1. The author is claiming that
   a) A firewall is a program that filters information going to the internet
   b) A firewall is a hardware and software that filters information going to the internet
   c) A firewall is a hardware and software that filters information coming from the internet
   d) Both a and c

2. From the text it is understood that
   a) Networks are connected to the internet via telephone lines.
   b) Networks are connected to the internet via T1 or T3 lines.
   c) Networks are connected to the internet via firewalls
   d) All a, b and c

3. The term "security hole" means
   a) Leaving a network insecure
   b) Leaving a program insecure
   c) Making a domain space in the network
   d) Both a and b

4. The term "the landscape is much different" means
   a) The image of a network is different
   b) Using firewalls changes the network structure
   c) Using firewalls makes a noticeable change to network access
   d) Both a and c

5. Using firewalls
   a) Network users can be controlled by one another
   b) Network users can control network access
   c) Network access can be controlled
   d) None