1. Modify the following statements to make them true.

A Virtual Private Network (VPN) is a (non-public / public) (computer) network, built within (non-public / public) network infrastructure, such as the Internet.
The term "encryption" means the security process for VPNs with the goal to ensure (confidentiality / authentication) and data (integrity / encrypting).

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2. Requirements for security in terms of VPN design are solved by means of:

1. _____
2. _____
3. _____
4. _____

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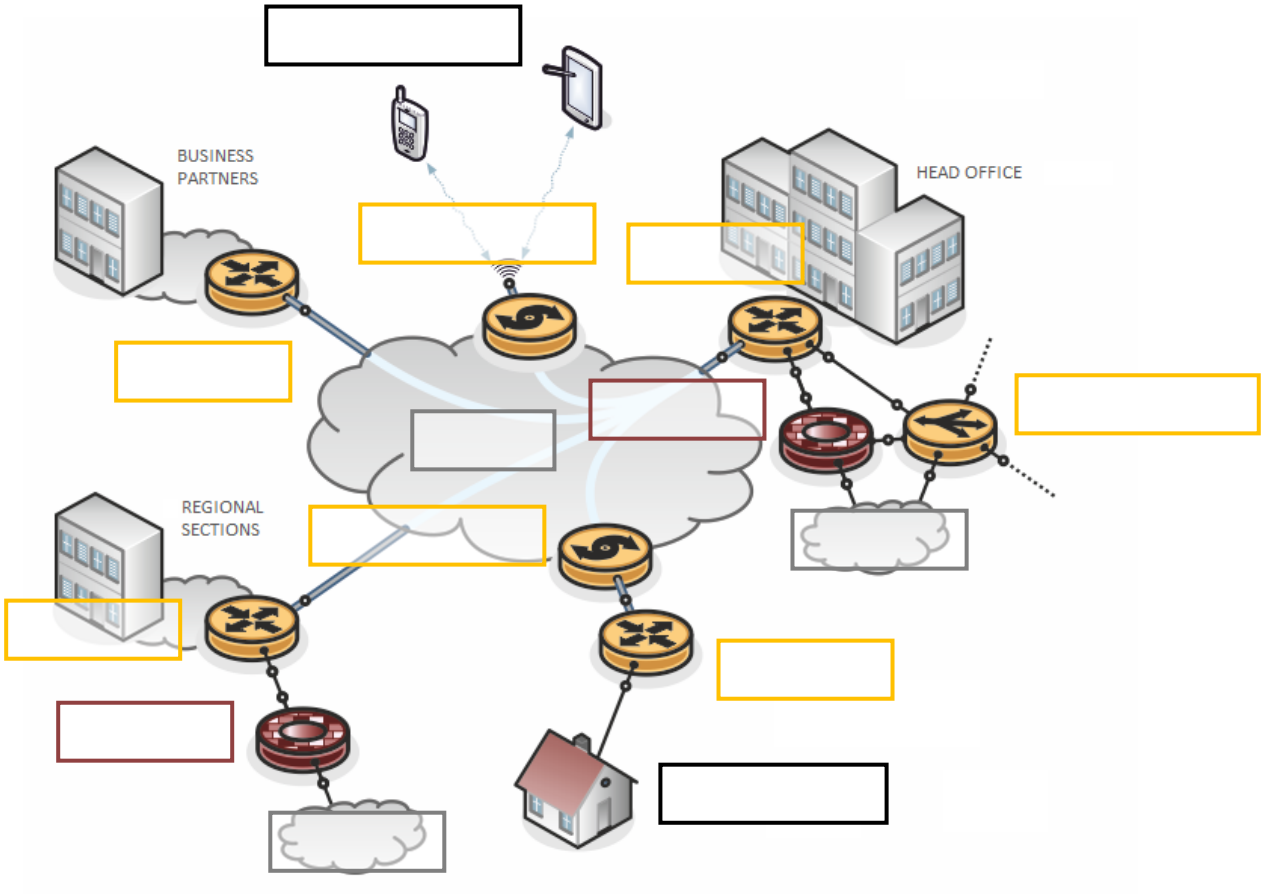
3. Add the correct labels to their individual parts in the following figure:



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4. Choose the correct statements from the options below.

☐ IPSec is not a comprehensive set of protocols for encryption, authentication, data integrity, and tunneling.

☐ IPSec allows two working modes - transport and tunneling.

☐ The IKE protocol has two modes to set up the tunnel - main and simple mode.

☐ One advantage of aggressive mode is the bandwidth and time savings required for message transmission.

☐ One disadvantage of the aggressive mode is the exchange of important information before the encrypted connection is established, which is susceptible to interception, known as so-called Sniffing.

☐ Diffie-Hellman algorithm (D-H algorithm) is a cryptographic protocol that, however, does not allow for the creation of encrypted connections between the communicating parties over an unsecured channel; it is necessary to establish an encryption key in advance.

☐ A qualified electronic signature ensures legal acceptability of signed documents.

☐ An electronic signature is used exclusively by a legal person or a state organization; an electronic seal is exclusively used by a natural person.

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5. Modify the following statements to make them true.

Qualified seal is based on (qualified / guaranteed) electronic signature, it is its equivalent with regard to the area of its use (exclusively for a (legal / natural) person).

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6. An electronically signed timestamp structure includes, among others:

1. _____

2. _____

3. _____

4. _____

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