* 1. Compare and contrast various types of security controls.

First for the categories there is four and each one of them needs the other one so these four security controls can be effective:

1.1.1 categories of security controls.

1.1.1.1 The technical control:

The technical control is the technologies, hardware or software to protect the system and the data automatedly or through forced rules.  
for example: firewalls, VPN, antiviruses, MFA, data encryption…  
  
1.1.1.2 Managerial Controls:

Also known as administrative control, it can be looking at like the human efforts in these types, it involves the guidelines to supervise and manage the information system, policies and procedures.  
for example: Security Awareness Training, Incident Response Plans…

1.1.1.3 operational control:

Unlike using technologies in technical controls, here we use people instead of automated systems.

For example: security guards, user management change management,

1.1.1.4 physical controls:

Now we are talking about the facilities and the hardware that would limit someone’s physical access to a room, a system or a device.

For example: locks, alarm systems, and surveillance cameras.

1.1.2 types of security controls.

1.1.2.1 preventive: is to block access to a resource, it can be a firewall or a security guard check.

1.1.2.2 Deterrent: is to make the attacker think twice it can be a splash screen or a warning sign.

1.1.2.3 Detective: this may not prevent access but it identifies or sometimes warn us when a breach has occurred like motions detectors or review login reports.

1.1.2.4 Corrective: it applies a control after an event has been detected and reverse the impact of an event it can be policies for reporting issues or backup recovery

1.1.2.5 compensating controls: These are alternative controls used when principal controls are not feasible. They provide a comparable level of security. Examples include additional monitoring or manual processes in place of automated tools

1.1.2.6 **Directive Controls:** are rules or instructions that tell people **how to behave** to keep information safe. They guide users on what they should or should not do.

Sources:   
infosectrain.com  
professormesser.com