

## Unit 5 Critical Thinking Questions

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- 1. Would you prefer to use an integrated router, switch, and firewall configuration for a home network, or would you prefer to operate them as separate systems? What security consideration went into your decision-making?**

I would want to use them as separate ones, because it poses a security threat when they are linked together. If someone were able to hack into a combined system, they would have access to all three components. As separate systems, they would have to hack each system at a time and the hacking would be able to be stopped before all is hacked.

- 2. Between MAC, DAC, and RBAC, which would you recommend to someone starting up an online retailing company who had to maintain customer records, track sales, etc., and had a sizable staff of 20 or more employees? Why?**

I would recommend to them that they choose RBAC. RBAC is a form of access control which is suitable to separate responsibilities in a system where multiple roles are fulfilled. This would allow different employees to be able to manage different things and have access to their specific responsibility.

- 3. List at least three ways you could improve the security of a system that relies on a flash drive / USB memory stick. Remember that there are multiple categories of control, including physical and logical!**

1. Encrypt the data before storage
2. Encrypt the data on the USB drive itself
3. Encryption with hardware

- 4. Imagine you are in charge of setting acceptable password policies for customer accounts for a banking website. List at least three password requirements you would implement.**

1. Upper and lowercase letters
2. Include numbers
3. Include special symbols

- 5. What rough outline of a policy would you establish to determine who should be allowed to have administrative rights on a computer system with role-based access control? Remember, policies can refer to specific workstations, employee types, customer types, etc. Defend the major tenets of your policy.**

I would implement a policy that states that users are given access only to the resources they need, not the entire system. The basic principle of Role-Based Access Control is simple: the Finance department can't see HR data and vice versa. This would prevent problems from occurring if someone from a different department were to change something in another department's resources. This policy would have people only seeing their stuff, and would make things run a lot smoother.