The Tech AZ-900: Updated Exam Q&A Series – Part 4 101 North America is represented by a single Azure region. False True North America has several Azure regions, including West US, Central US, South Central US, East Us, and Canada East. 102 Azure web app, Azure logic app and Azure SQL database are all examples of Platform as a Service (Paas). False True





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DNS server runs on a virtual machine is PaaS.

True

False

In general, PaaS (Platform-as-a-Service) is about a platform where a developer can design and deploy an application. So, a regular DNS server runs on a virtual machine is not PaaS. An Azure virtual machine is considered laaS as it offers computing resources.

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SQL Server installed on a virtual machine is SaaS.

True

False

If you install SQL Server on a virtual machine manually or by using out of the box image, it is still a virtual machine. This means customers you still need to manage all of the platform aspects. In simple words you have to maintain the operating system settings, patches, middleware, SQL Server runtime settings, etc.





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Azure SQL database is an example of PaaS.

True

False

Customers who purchase Azure SQL Database don't need to maintain anything related to SQL platform because Microsoft manages that. They just use it by deploying their tables and data and consuming it with their applications That's why this is a Platform as a Service model. Its not Software as a Service because they still need to maintain the database in order tor their applications to work.

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Azure files is an example of SaaS.

True

False

Azure Files is a PaaS (platform-as-a-service) offering provided by Microsoft Azure that is built on top of Azure Storage. It provides fully managed file shares over a protocol called SMB (Server Message Block).



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Cloud Computing leverages virtualization to provide services to multiple customers simultaneously

True

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You need to identify the type of failure for which an Azure Availability Zone can be used to protect access to Azure services. What should you identify?

- a) a storage failure
- b) an Azure region failure
- c) a physical server failure
- d) an Azure data center failure

Availability zones expand the level of control you have to maintain the availability of the applications and data on your VMs. An Availability Zone is a physically separate zone, within an Azure region.



Use DDoS Protection service in combination with a web application firewall (WAF) for protection both at the ----- (layer 3 and 4, offered by DDoS Protection Standard) and at the ----- (layer 7, offered by a WAF).

- a) Physical security
- b) Identity and access
- c) Perimeter
- d) Network
- e) Compute
- f) Application
- g) Data

Blackboard



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A company is planning on deploying Microsoft Azure resources to a Resource Group (RG). But the resources would belong to different locations. Can you have resources that belong to the same resource group but be in multiple locations?

No.

Answer is Yes. Because when creating a resource group, you need to provide a location for that resource group. You may be wondering, "Why does a resource group need a location? And, if the resources can have different locations than the resource group, why does the resource group location matter at all?"





A company is planning on hosting an application on a set of Virtual Machines. The Virtual Machines are going to be running for a prolonged duration of time. Which of the following should be considered to reduce the overall cost of Virtual Machine usage?

- a) Premium Disks
- b) Virtual Machine Scale sets
- c) Azure Reservations
- d) Azure Resource Groups







What are two characteristics of the public cloud? Each correct answer presents a complete solution.

- a) Dedicated hardware.
- b) Unsecured connections.
- c) Limited storage.
- d) Metered pricing.
- e) Self-service management.
 - a) In Public cloud you don't have dedicated hardware. It is shared among multiple customers.
 - b) Connections to the public cloud are secure.
 - c) Storage is not limited. You can have as much storage as you like.
 - d) Cloud does provide metered pricing, as you pay for the resources you use.
 - e) Cloud provides a self-managed service, as you can use the portal to add, change and remove the resources you need when you need them.







NSG can be applied to what level?

- a) Subscription level
- b) Subnet level
- c) Management group level
- d) Virtual Machine / NIC Level

NSG is mainly used for filtering traffic in and out of the Virtual Network (VNET) in Azure.

NSG can be applied at two levels : -

- a) Subnet: If you implement NSG at the subnet level all VMs in that subnet will be applied with the rules imposed in NSG.
- **b)** VM / NIC: If you apply at VM/NIC level , the rule will be implemented only for that VM.





What are different level of access tiers for blob data, select all applicable options?

- a) Hot Tier
- b) Cold Tier
- c) Archive Tier
- d) Permanent Tier

Hot – frequently accessed data

Cool – infrequently accessed data (lower availability, high durability)

Archive - rarely (if-ever) accessed data







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What is Azure policy initiative?

- a) a collection of policy definitions
- b) collection of Azure policy definition assignments
- c) group of Azure Blue Prints definition
- d) group of role based access control (RBAC)?









What is guaranteed in an Azure Service Level Agreement (SLA) for virtual machines?

- a) uptime
- b) feature availability
- c) bandwidth
- d) performance

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Which statement accurately describes the Modern Lifecycle Policy for Azure services?

- a) Microsoft provides mainstream support for a service for five years.
- b) Microsoft provides a minimum of 12 months' notice before ending support for a service.
- c) After a service is made generally available, Microsoft provides support for the service for a minimum of four years.
- d) When a service is retired, you can purchase extended support for the service for up to five years.



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For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Statement

Yes

NO.

a) Most Azure services are introduced in private preview before being introduced in public preview and then in general availability



b) Azure services in public preview can be managed only by using Azure CLI



c) The cost of an Azure service in private preview decrease when the service







becomes generally available





For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Statement Yes With a consumption-based plan, you pay a fixed rate for all data sent to or a) from virtual machines hosted in the cloud. With a consumption-based plan, you reduce overall costs by paying only for extra capacity when it is required. Serverless computing is an example of a consumption-based plan.



Azure services in public preview can be managed using which of the management tools?

- a) Azure Portal
- b) Azure CLI







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For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Statement Yes No a) You can associate a network security group (NSG) to a virtual network subnet. b) You can associate a network security group (NSG) to a virtual network. c) You can associate a network security group (NSG) to a network interface.

You can associate zero, or one, network security group to each virtual network <u>subnet</u> and <u>network interface</u> in a virtual machine





You can enable just in time (JIT) VM access by using:

- a) Azure Bastion
- b) Azure Firewall
- c) Azure Front Door
- d) Azure Security Center

The just-in-time (JIT) virtual machine (VM) access feature in Azure Security Center allows you to lock down inbound traffic to your Azure Virtual Machines. This reduces exposure to attacks while providing easy access when you need to connect to a VM.





A company is using containers for deploying all of its web applications. During a security audit, you notice that Microsoft Defender for Cloud is not being used properly to provide misconfigurations related to containers. For which resource can you NOT use Microsoft Defender for Cloud to secure the containers?

- a) Azure Kubernetes Service (AKS)
- b) Container hosts (VMs running Docker)
- c) Azure Container Registry (ACR)
- d) Azure Container Instance (ACI)

Azure Container Instance (ACI) does not use Microsoft Defender for Cloud. ACI is a service that allows you to run containers in the cloud without using VMs.



You have an Azure environment. You need to create a new Azure virtual machine from a tablet that runs the Android operating system. What are three possible solutions? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- a) Use Bash in Azure Cloud Shell.
- b) Use PowerShell in Azure Cloud Shell.
- c) Use the PowerApps portal.
- d) Use the Security & Compliance admin center.
- e) Use the Azure portal.









<u>Azure Site Recovery</u> provides fault tolerance for virtual machines. Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed." If the statement is incorrect, select the answer choice that makes the statement correct.

- a) No change is needed.
- b) disaster recovery
- c) elasticity
- d) high availability

Azure Site Recovery helps ensure business continuity by keeping business apps and workloads running during outages. Site Recovery replicates workloads running on physical and virtual machines (VMs) from a primary site to a secondary location.



<u>An Availability Zone</u> in Azure has physically separate locations [across two continents.] Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed." If the statement is incorrect, select the answer choice that makes the statement correct.

- a) No change is needed.
- b) within a single Azure region
- c) within multiple Azure regions
- d) within a single Azure datacenter

Availability Zones is a high-availability offering that protects your applications and data from datacenter failures. Availability Zones are unique physical locations within an Azure region.





A systems ability to scale dynamically is called:

- a) Agility
- b) Elasticity
- c) Extendibility

When the system is elastic that means it can adjust its processing power to match the demand. This means the system can allocate and deallocate resources dynamically.







Horizontal Scaling and Vertical Scaling are two types of scaling in Azure?

True

False

Horizontal vs vertical scaling

Auto-scale only scales horizontally, which is an increase ("scale out") or decrease ("scale in") in the number of VM instances.

Horizontal is more flexible in a cloud situation as it allows you to run potentially thousands of VMs to handle load.

In contrast, vertical scaling is different. It keeps the same number of VMs but makes the VMs more ("scale up") or less ("scale down") powerful.





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Which of the following is correct Lifecyle of Azure Services:

Public preview

Generally available (GA)

Dev preview

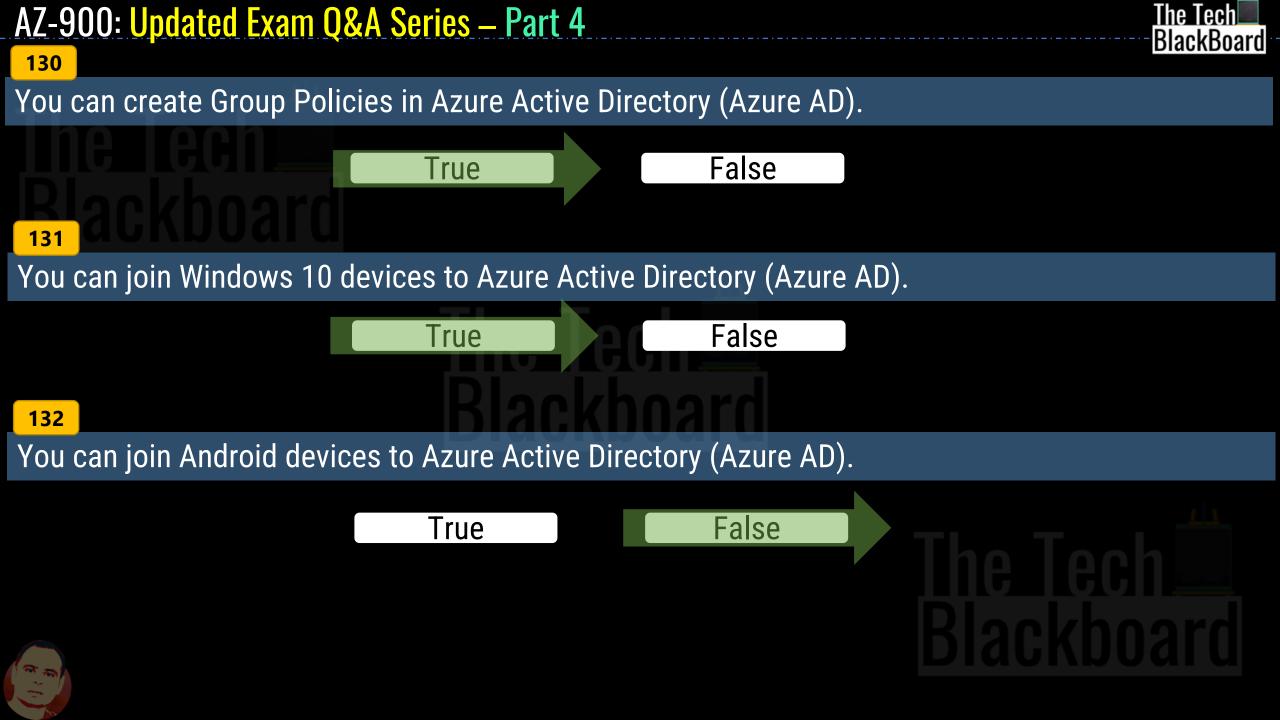
Public preview

Public preview

Generally available (GA)









Which resources can be used as a source for a Network security group inbound security rule?

- a) Application security groups only
- b) IP Address only
- c) Service Tags only
- d) IP Addresses, Service tags and Application security groups

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You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Yes

Solution: From the Azure portal, launch Azure Cloud Shell and select Bash. Run the command in Cloud Shell.

Does this meet the goal?

No







You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Solution: From a computer that runs Windows 10, install Azure CLI. From a command prompt, sign into Azure and then run the command.

Does this meet the goal?

Yes



