Question #17 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You plan to deploy multiple instances of an Azure web app across several Azure regions.
You need to design an access solution for the app. The solution must meet the following replication requirements:
- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Traffic Manager to provide access to the app.
Does this meet the goal?

A. Yes

B. No Most Voted

Correct Answer: *B*
Azure Traffic Manager is a DNS-based traffic load balancer. This service allows you to distribute traffic to your public facing applications across the global Azure regions. Traffic Manager also provides your public endpoints with high availability and quick responsiveness. It does not provide rate limiting.
Note: Azure Front Door would meet the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/web-sites-traffic-manager https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell

Community vote distribution
B (100%)

Question #18 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You plan to deploy multiple instances of an Azure web app across several Azure regions.
You need to design an access solution for the app. The solution must meet the following replication requirements:
- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Load Balancer to provide access to the app.
Does this meet the goal?

A. Yes

B. No Most Voted

Correct Answer: *B*
Azure Application Gateway and Azure Load Balancer do not support rate or connection limits.
Note: Azure Front Door would meet the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.
Reference:
https://www.nginx.com/blog/nginx-plus-and-azure-load-balancers-on-microsoft-azure/ https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell

Community vote distribution
B (100%)

Question #19 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You plan to deploy multiple instances of an Azure web app across several Azure regions.
You need to design an access solution for the app. The solution must meet the following replication requirements:
- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Application Gateway to provide access to the app.
Does this meet the goal?

A. Yes

B. No Most Voted

Correct Answer: *B*
Azure Application Gateway and Azure Load Balancer do not support rate or connection limits.
Note: Azure Front Door would meet the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.
Reference:
https://www.nginx.com/blog/nginx-plus-and-azure-load-balancers-on-microsoft-azure/ https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell

Community vote distribution
B (100%)

Question #20 *Topic 4*

HOTSPOT -
Your company has two on-premises sites in New York and Los Angeles and Azure virtual networks in the East US Azure region and the West US Azure region.
Each on-premises site has ExpressRoute Global Reach circuits to both regions.
You need to recommend a solution that meets the following requirements:
- Outbound traffic to the internet from workloads hosted on the virtual networks must be routed through the closest available on-premises site.
- If an on-premises site fails, traffic from the workloads on the virtual networks to the internet must reroute automatically to the other site.

What should you include in the recommendation? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Routing from the virtual networks to the on-premises locations must be configured by using:

- Azure default routes
- Border Gateway Protocol (BGP)
- User-defined routes

The automatic routing configuration following a failover must be handled by using:

- Border Gateway Protocol (BGP)
- Hot Standby Routing Protocol (HSRP)
- Virtual Router Redundancy Protocol (VRRP)

Correct Answer:

Answer Area

Routing from the virtual networks to the on-premises locations must be configured by using:

- Azure default routes
- **Border Gateway Protocol (BGP)**
- User-defined routes

The automatic routing configuration following a failover must be handled by using:

- **Border Gateway Protocol (BGP)**
- Hot Standby Routing Protocol (HSRP)
- Virtual Router Redundancy Protocol (VRRP)

Box 1: Border Gateway Protocol (BGP)

An on-premises network gateway can exchange routes with an Azure virtual network gateway using the border gateway protocol (BGP). Using BGP with an Azure virtual network gateway is dependent on the type you selected when you created the gateway. If the type you selected were: ExpressRoute: You must use BGP to advertise on-premises routes to the Microsoft Edge router. You cannot create user-defined routes to force traffic to the

Question #21 *Topic 4*

HOTSPOT -

You are designing an application that will use Azure Linux virtual machines to analyze video files. The files will be uploaded from corporate offices that connect to

Azure by using ExpressRoute.

You plan to provision an Azure Storage account to host the files.

You need to ensure that the storage account meets the following requirements:

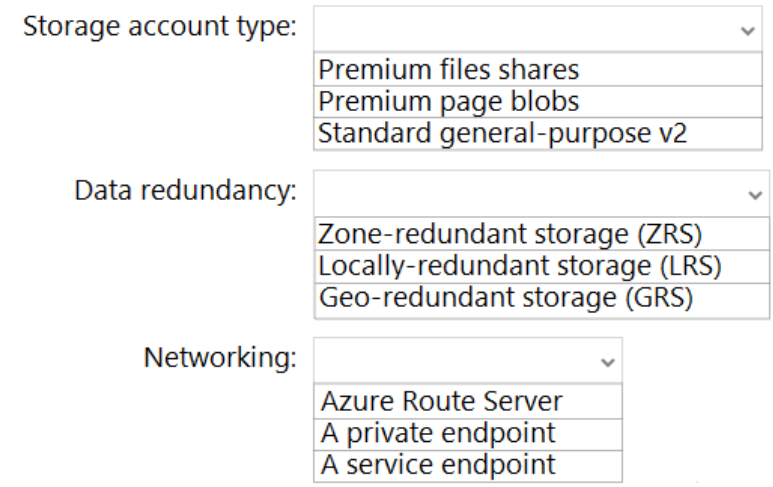
- Supports video files of up to 7 TB
- Provides the highest availability possible
- Ensures that storage is optimized for the large video files
- Ensures that files from the on-premises network are uploaded by using ExpressRoute

How should you configure the storage account? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

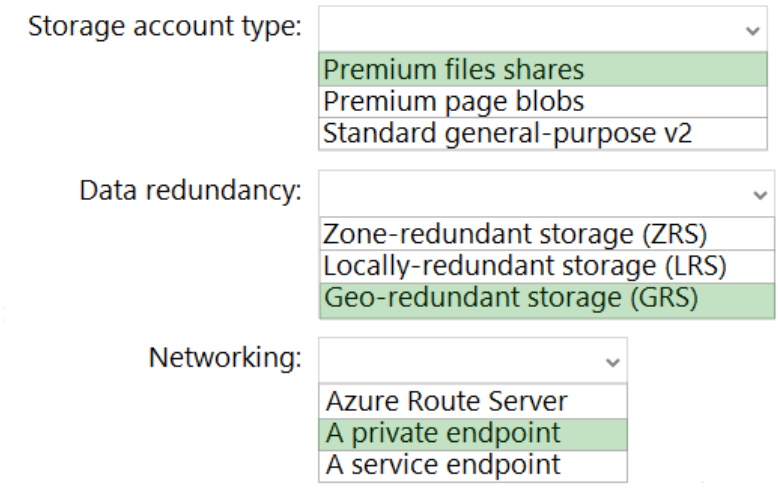
Hot Area:

Answer Area



Correct Answer:

Answer Area



Box 1: Premium page blobs -

The maximum size for a page blob is 8 TiB.

Incorrect:

Not Premium file shares:

Max file size for Standard and Premium file shares are 4 TB.

Box 2: Geo-redundant storage (GRS)

GRS provides additional redundancy for data storage compared to LRS or ZRS.

Box 3: A private endpoint -

Azure Private Link allows you to securely link Azure PaaS services to your virtual network using private endpoints. For many services, you just set up an endpoint per resource. This means you can connect your on-premises or multi-cloud servers with Azure Arc and send all traffic over an Azure ExpressRoute or site-to-site

VPN connection instead of using public networks.

Reference:

https://docs.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs--and-page-blobs

https://docs.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets https://docs.microsoft.com/en-us/azure/azure-arc/servers/private-link-security

Question #22 *Topic 4*

HOTSPOT -

A company plans to implement an HTTP-based API to support a web app. The web app allows customers to check the status of their orders.

The API must meet the following requirements:

- Implement Azure Functions.
- Provide public read-only operations.
- Prevent write operations.

You need to recommend which HTTP methods and authorization level to configure.

What should you recommend? To answer, configure the appropriate options in the dialog box in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

HTTP methods:
- API methods
- GET only
- GET and POST only
- GET, POST, and OPTIONS only

Authorization level:
- Function
- Anonymous
- Admin

Correct Answer:

Answer Area

HTTP methods:
- API methods
- **GET only**
- GET and POST only
- GET, POST, and OPTIONS only

Authorization level:
- Function
- **Anonymous**
- Admin

Box 1: GET only -

Get for read-only-

Box 2: Anonymous -

Anonymous for public operations.

Question #23 *Topic 4*

You have an Azure subscription.
You need to recommend a solution to provide developers with the ability to provision Azure virtual machines. The solution must meet the following requirements:
- Only allow the creation of the virtual machines in specific regions.
- Only allow the creation of specific sizes of virtual machines.

What should you include in the recommendation?

A. Azure Resource Manager (ARM) templates

B. Azure Policy Most Voted

C. Conditional Access policies

D. role-based access control (RBAC)

Correct Answer: *B*
Azure Policies allows you to specify allowed locations, and allowed VM SKUs.
Reference:
https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage

Community vote distribution
B (100%)

Question #24 *Topic 4*

DRAG DROP -

You have an on-premises network that uses an IP address space of 172.16.0.0/16.

You plan to deploy 30 virtual machines to a new Azure subscription.

You identify the following technical requirements:

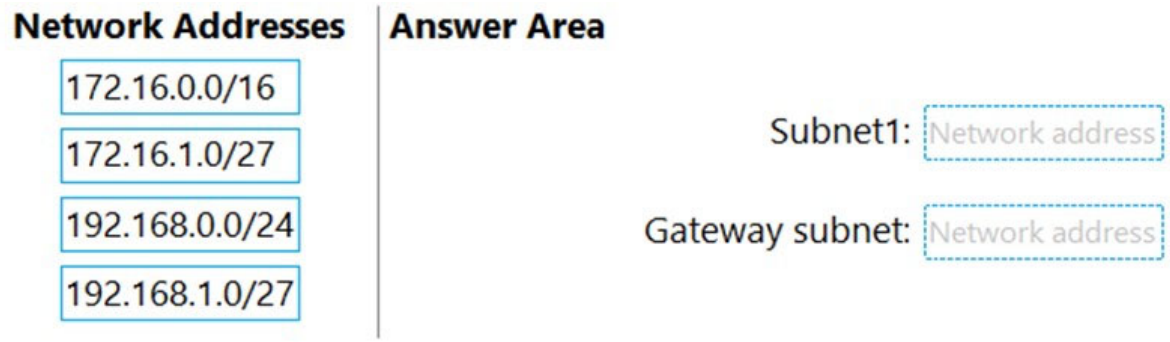
- All Azure virtual machines must be placed on the same subnet named Subnet1.
- All the Azure virtual machines must be able to communicate with all on-premises servers.
- The servers must be able to communicate between the on-premises network and Azure by using a site-to-site VPN.

You need to recommend a subnet design that meets the technical requirements.

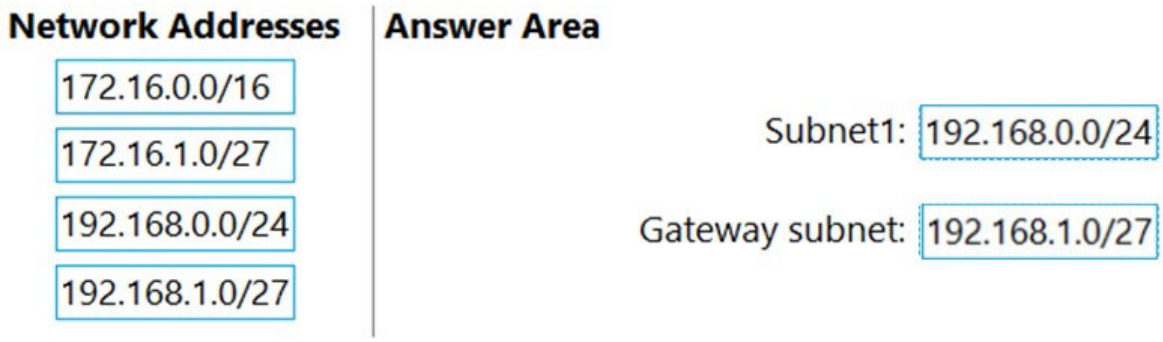
What should you include in the recommendation? To answer, drag the appropriate network addresses to the correct subnets. Each network address may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:



Correct Answer:



Question #25 *Topic 4*

You have data files in Azure Blob Storage.
You plan to transform the files and move them to Azure Data Lake Storage.
You need to transform the data by using mapping data flow.
Which service should you use?

A. Azure Databricks

B. Azure Storage Sync

C. Azure Data Factory Most Voted

D. Azure Data Box Gateway

Correct Answer: *C*
You can copy and transform data in Azure Data Lake Storage Gen2 using Azure Data Factory or Azure Synapse Analytics.
Reference:
https://docs.microsoft.com/en-us/azure/data-factory/connector-azure-data-lake-storage

Community vote distribution
C (100%)

Question #26 *Topic 4*

You have an Azure subscription.
You need to deploy an Azure Kubernetes Service (AKS) solution that will use Windows Server 2019 nodes. The solution must meet the following requirements:
- Minimize the time it takes to provision compute resources during scale-out operations.
- Support autoscaling of Windows Server containers.

Which scaling option should you recommend?

A. Kubernetes version 1.20.2 or newer

B. Virtual nodes with Virtual Kubelet ACI Most Voted

C. cluster autoscaler Most Voted

D. horizontal pod autoscaler

Correct Answer: *C*
Deployments can scale across AKS with no delay as cluster autoscaler deploys new nodes in your AKS cluster.
Note: AKS clusters can scale in one of two ways:
* The cluster autoscaler watches for pods that can't be scheduled on nodes because of resource constraints. The cluster then automatically increases the number of nodes.
* The horizontal pod autoscaler uses the Metrics Server in a Kubernetes cluster to monitor the resource demand of pods. If an application needs more resources, the number of pods is automatically increased to meet the demand.
Incorrect:
Not D: If your application needs to rapidly scale, the horizontal pod autoscaler may schedule more pods than can be provided by the existing compute resources in the node pool. If configured, this scenario would then trigger the cluster autoscaler to deploy additional nodes in the node pool, but it may take a few minutes for those nodes to successfully provision and allow the Kubernetes scheduler to run pods on them.
Reference:
https://docs.microsoft.com/en-us/azure/aks/cluster-autoscaler

Community vote distribution
C (82%) Other

Question #27 *Topic 4*

HOTSPOT -

Your on-premises network contains a file server named Server1 that stores 500 GB of data.

You need to use Azure Data Factory to copy the data from Server1 to Azure Storage.

You add a new data factory.

What should you do next? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

From Server1:
- Install an Azure File Sync agent.
- Install a self-hosted integration runtime.
- Install the File Server Resource Manager role service.

From the data factory:
- Create a pipeline.
- Create an Azure Import/Export job.
- Provision an Azure-SQL Server Integration Services (SSIS) integration runtime.

Correct Answer:

Answer Area

From Server1:
- Install an Azure File Sync agent.
- **Install a self-hosted integration runtime.**
- Install the File Server Resource Manager role service.

From the data factory:
- **Create a pipeline.**
- Create an Azure Import/Export job.
- Provision an Azure-SQL Server Integration Services (SSIS) integration runtime.

Box 1: Install a self-hosted integration runtime.

If your data store is located inside an on-premises network, an Azure virtual network, or Amazon Virtual Private Cloud, you need to configure a self-hosted integration runtime to connect to it.

The Integration Runtime to be used to connect to the data store. You can use Azure Integration Runtime or Self-hosted Integration Runtime (if your data store is located in private network). If not specified, it uses the default Azure Integration Runtime.

Box 2: Create a pipeline.

You perform the Copy activity with a pipeline.

Reference:

https://docs.microsoft.com/en-us/azure/data-factory/connector-file-system

Question #28 *Topic 4*

You have an Azure subscription.
You need to recommend an Azure Kubernetes Service (AKS) solution that will use Linux nodes. The solution must meet the following requirements:
- Minimize the time it takes to provision compute resources during scale-out operations.
- Support autoscaling of Linux containers.
- Minimize administrative effort.

Which scaling option should you recommend?

A. horizontal pod autoscaler

B. cluster autoscaler

C. virtual nodes Most Voted

D. Virtual Kubelet

Correct Answer: *C*
To rapidly scale application workloads in an AKS cluster, you can use virtual nodes. With virtual nodes, you have quick provisioning of pods, and only pay per second for their execution time. You don't need to wait for Kubernetes cluster autoscaler to deploy VM compute nodes to run the additional pods. Virtual nodes are only supported with Linux pods and nodes.
Reference:
https://docs.microsoft.com/en-us/azure/aks/virtual-nodes

Community vote distribution
C (96%)

Question #29 *Topic 4*

You are designing an order processing system in Azure that will contain the Azure resources shown in the following table.

Name	Type	Purpose
App1	App Service web app	Processes customer orders
Function1	Function	Checks product availability at vendor 1
Function2	Function	Checks product availability at vendor 2
storage2	Storage account	Stores order processing logs

The order processing system will have the following transaction flow:

- A customer will place an order by using App1.
- When the order is received, App1 will generate a message to check for product availability at vendor 1 and vendor 2.
- An integration component will process the message, and then trigger either Function1 or Function2 depending on the type of order.
- Once a vendor confirms the product availability, a status message for App1 will be generated by Function1 or Function2.
- All the steps of the transaction will be logged to storage1.

Which type of resource should you recommend for the integration component?

A. an Azure Service Bus queue Most Voted

B. an Azure Data Factory pipeline Most Voted

C. an Azure Event Grid domain

D. an Azure Event Hubs capture

Correct Answer: *B*

Azure Data Factory is the platform is the cloud-based ETL and data integration service that allows you to create data-driven workflows for orchestrating data movement and transforming data at scale. Using Azure Data Factory, you can create and schedule data-driven workflows (called pipelines) that can ingest data from disparate data stores.

Data Factory contains a series of interconnected systems that provide a complete end-to-end platform for data engineers.

Reference:

https://docs.microsoft.com/en-us/azure/data-factory/introduction

Community vote distribution

B (56%) A (42%)

Question #30 *Topic 4*

You have 100 Microsoft SQL Server Integration Services (SSIS) packages that are configured to use 10 on-premises SQL Server databases as their destinations.
You plan to migrate the 10 on-premises databases to Azure SQL Database.
You need to recommend a solution to create Azure-SQL Server Integration Services (SSIS) packages. The solution must ensure that the packages can target the
SQL Database instances as their destinations.
What should you include in the recommendation?

A. Data Migration Assistant (DMA)

B. Azure Data Factory Most Voted

C. Azure Data Catalog

D. SQL Server Migration Assistant (SSMA)

Correct Answer: *B*
Migrate on-premises SSIS workloads to SSIS using ADF (Azure Data Factory).
When you migrate your database workloads from SQL Server on premises to Azure database services, namely Azure SQL Database or Azure SQL Managed
Instance, your ETL workloads on SQL Server Integration Services (SSIS) as one of the primary value-added services will need to be migrated as well.
Azure-SSIS Integration Runtime (IR) in Azure Data Factory (ADF) supports running SSIS packages. Once Azure-SSIS IR is provisioned, you can then use familiar tools, such as SQL Server Data Tools (SSDT)/SQL Server Management Studio (SSMS), and command-line utilities, such as dtinstall/dtutil/dtexec, to deploy and run your packages in Azure.
Reference:
https://docs.microsoft.com/en-us/azure/data-factory/scenario-ssis-migration-overview

Community vote distribution
B (100%)

Question #31 *Topic 4*

You have an Azure virtual machine named VM1 that runs Windows Server 2019 and contains 500 GB of data files.
You are designing a solution that will use Azure Data Factory to transform the data files, and then load the files to Azure Data Lake Storage.
What should you deploy on VM1 to support the design?

A. the On-premises data gateway

B. the Azure Pipelines agent

C. the self-hosted integration runtime Most Voted

D. the Azure File Sync agent

Correct Answer: *C*
The integration runtime (IR) is the compute infrastructure that Azure Data Factory and Synapse pipelines use to provide data-integration capabilities across different network environments.
A self-hosted integration runtime can run copy activities between a cloud data store and a data store in a private network. It also can dispatch transform activities against compute resources in an on-premises network or an Azure virtual network. The installation of a self-hosted integration runtime needs an on-premises machine or a virtual machine inside a private network.
Reference:
https://docs.microsoft.com/en-us/azure/data-factory/create-self-hosted-integration-runtime

Community vote distribution
C (100%)

Question #32 *Topic 4*

You have an Azure Active Directory (Azure AD) tenant that syncs with an on-premises Active Directory domain.
Your company has a line-of-business (LOB) application that was developed internally.
You need to implement SAML single sign-on (SSO) and enforce multi-factor authentication (MFA) when users attempt to access the application from an unknown location.
Which two features should you include in the solution? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Azure AD Privileged Identity Management (PIM)

B. Azure Application Gateway

C. Azure AD enterprise applications Most Voted

D. Azure AD Identity Protection

E. Conditional Access policies Most Voted

Correct Answer: *DE*
D: The signals generated by and fed to Identity Protection, can be further fed into tools like Conditional Access to make access decisions, or fed back to a security information and event management (SIEM) tool for further investigation based on your organization's enforced policies.
Note: Identity Protection is a tool that allows organizations to accomplish three key tasks:
Automate the detection and remediation of identity-based risks.
Investigate risks using data in the portal.
Export risk detection data to your SIEM.
E: The location condition can be used in a Conditional Access policy.
Conditional Access policies are at their most basic an if-then statement combining signals, to make decisions, and enforce organization policies. One of those signals that can be incorporated into the decision-making process is location.
Organizations can use this location for common tasks like:
* Requiring multi-factor authentication for users accessing a service when they're off the corporate network.
* Blocking access for users accessing a service from specific countries or regions.
The location is determined by the public IP address a client provides to Azure Active Directory or GPS coordinates provided by the Microsoft Authenticator app.
Conditional Access policies by default apply to all IPv4 and IPv6 addresses.
Incorrect:
Not A: Privileged Identity Management (PIM) is a service in Azure Active Directory (Azure AD) that enables you to manage, control, and monitor access to important resources in your organization. These resources include resources in Azure AD, Azure, and other Microsoft Online Services such as Microsoft 365 or
Microsoft Intune.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview-identity-protection https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/location-condition

Community vote distribution
CE (100%)

Question #33 *Topic 4*

You plan to automata the deployment of resources to Azure subscriptions.
What is a difference between using Azure Blueprints and Azure Resource Manager (ARM) templates?

A. ARM templates remain connected to the deployed resources.

B. Only blueprints can contain policy definitions.

C. Only ARM templates can contain policy definitions.

D. Blueprints remain connected to the deployed resources. Most Voted

Correct Answer: *D*
With Azure Blueprints, the relationship between the blueprint definition (what should be deployed) and the blueprint assignment (what was deployed) is preserved.
This connection supports improved tracking and auditing of deployments.
Incorrect:
Not A: An ARM template is a document that doesn't exist natively in Azure - each is stored either locally or in source control or in Templates (preview). The template gets used for deployments of one or more Azure resources, but once those resources deploy there's no active connection or relationship to the template.
Not C: Blueprints are a declarative way to orchestrate the deployment of various resource templates and other artifacts such as:

Role Assignments -

Policy Assignments -
Azure Resource Manager templates (ARM templates)

Resource Groups -
Reference:
https://docs.microsoft.com/en-us/azure/governance/blueprints/overview#how-its-different-from-resource-manager-templates

Community vote distribution
D (100%)

Question #34 *Topic 4*

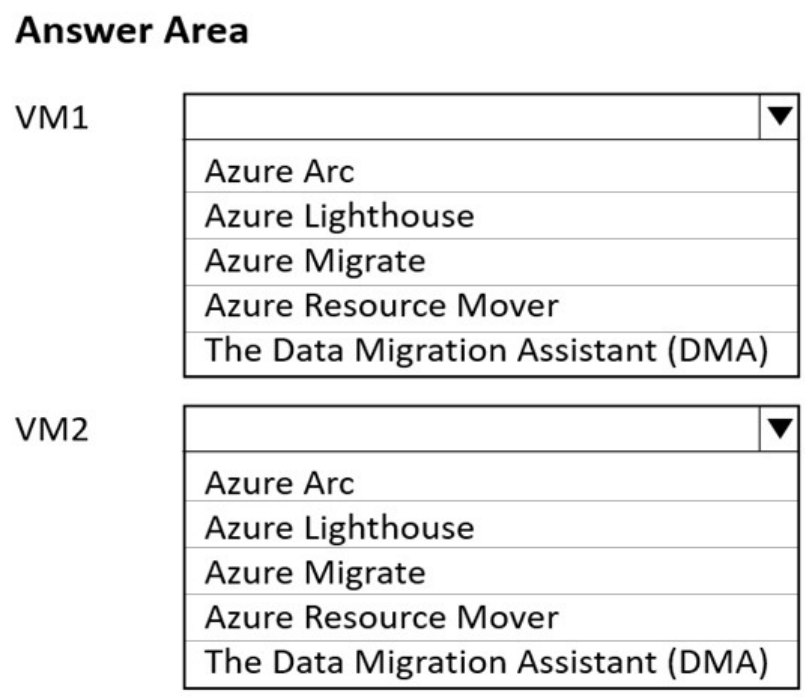
HOTSPOT -
You have the resources shown in the following table.

Name	Type	Resource group
VM1	Azure virtual machine	RG1
VM2	On-premises virtual machine	Not applicable

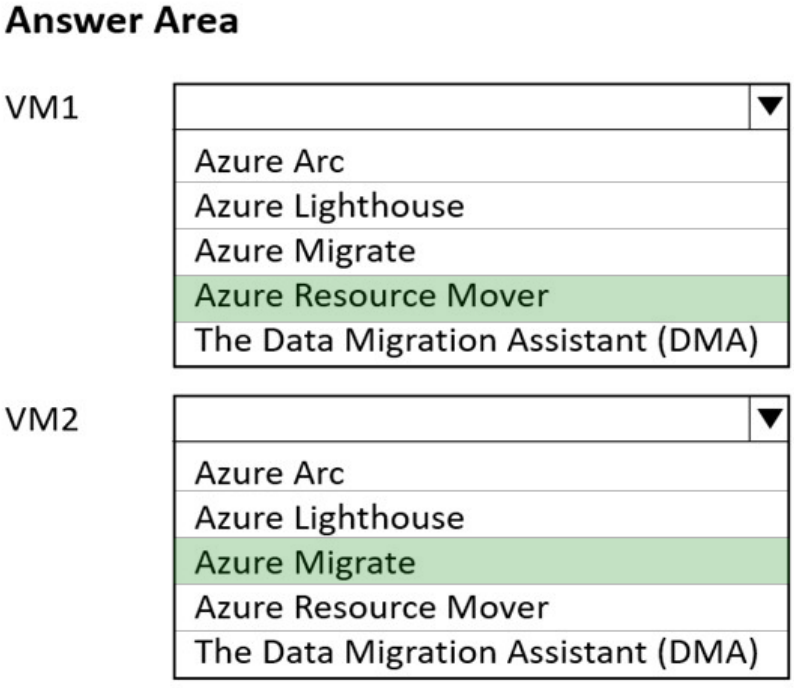
You create a new resource group in Azure named RG2.
You need to move the virtual machines to RG2.
What should you use to move each virtual machine? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:



Correct Answer:



Box 1: Azure Resource Mover -

To move Azure VMs to another region, Microsoft now recommends using Azure Resource Mover.

Incorrect:

Not Azure Migrate: We are not migrating, only moving a VM between resource groups.

Box 2: Azure Migrate -

Azure Migrate provides a centralized hub to assess and migrate on-premises servers, infrastructure, applications, and data to Azure.

Azure migrate includes Azure Migrate Server Migration: Migrate VMware VMs, Hyper-V VMs, physical servers, other virtualized servers, and public cloud VMs to

Azure.
Incorrect:
Not Arc: Azure Migrate is adequate. No need to use Azure Arc.
Not Data Migration Assistant: Data Migration Assistant is a stand-alone tool to assess SQL Servers.
It is used to assess SQL Server databases for migration to Azure SQL Database, Azure SQL Managed Instance, or Azure VMs running SQL Server.
Not Lighthouse: Azure Lighthouse enables multi-tenant management with scalability, higher automation, and enhanced governance across resources.
With Azure Lighthouse, service providers can deliver managed services using comprehensive and robust tooling built into the Azure platform. Customers maintain control over who has access to their tenant, which resources they can access, and what actions can be taken.
Reference:
https://docs.microsoft.com/en-us/azure/resource-mover/overview https://docs.microsoft.com/en-us/azure/migrate/migrate-services-overview https://docs.microsoft.com/en-us/azure/site-recovery/azure-to-azure-tutorial-migrate

Question #35 *Topic 4*

You plan to deploy an Azure App Service web app that will have multiple instances across multiple Azure regions.
You need to recommend a load balancing service for the planned deployment The solution must meet the following requirements:
- Maintain access to the app in the event of a regional outage.
- Support Azure Web Application Firewall (WAF).
- Support cookie-based affinity.
- Support URL routing.

What should you include in the recommendation?

A. Azure Front Door Most Voted

B. Azure Traffic Manager

C. Azure Application Gateway

D. Azure Load Balancer

Correct Answer: *A*
Azure Front Door works across regions and support URL routing (HTTP(S)).
Note: HTTP(S) load-balancing services are Layer 7 load balancers that only accept HTTP(S) traffic. They are intended for web applications or other HTTP(S) endpoints. They include features such as SSL offload, web application firewall, path-based load balancing, and session affinity.

Service	Global/regional	Recommended traffic
Azure Front Door	Global	HTTP(S)
Traffic Manager	Global	non-HTTP(S)
Application Gateway	Regional	HTTP(S)
Azure Load Balancer	Regional	non-HTTP(S)

Incorrect:
Application Gateway and Azure Load Balancer only work within one single region.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview

Community vote distribution
A (95%) 5%

Question #36 *Topic 4*

HOTSPOT -

You have the Azure resources shown in the following table.

Name	Type	Description
VNET1	Virtual network	Connected to an on-premises network by using ExpressRoute
VM1	Virtual machine	Configured as a DNS server
SQLDB1	Azure SQL Database	Single instance
PE1	Private endpoint	Provides connectivity to SQLDB1
contoso.com	Private DNS zone	Linked to VNET1 and contains an A record for PE1
contoso.com	Public DNS zone	Contains a C NAME record for SQLDB1

You need to design a solution that provides on-premises network connectivity to SQLDB1 through PE1.

How should you configure name resolution? To answer select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Azure configuration

- Configure VM1 to forward contoso.com to the public DNS zone
- Configure VM1 to forward contoso.com to the Azure-provided DNS at 168.63.129.16
- In VNet1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

On-premises DNS configuration

- Forward contoso.com to VM1
- Forward contoso.com to the public DNS zone
- Forward contoso.com to the Azure-provisioned DNS at 168.63.129.16

Correct Answer:

Answer Area

Azure configuration

- Configure VM1 to forward contoso.com to the public DNS zone
- Configure VM1 to forward contoso.com to the Azure-provided DNS at 168.63.129.16
- In VNet1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

On-premises DNS configuration

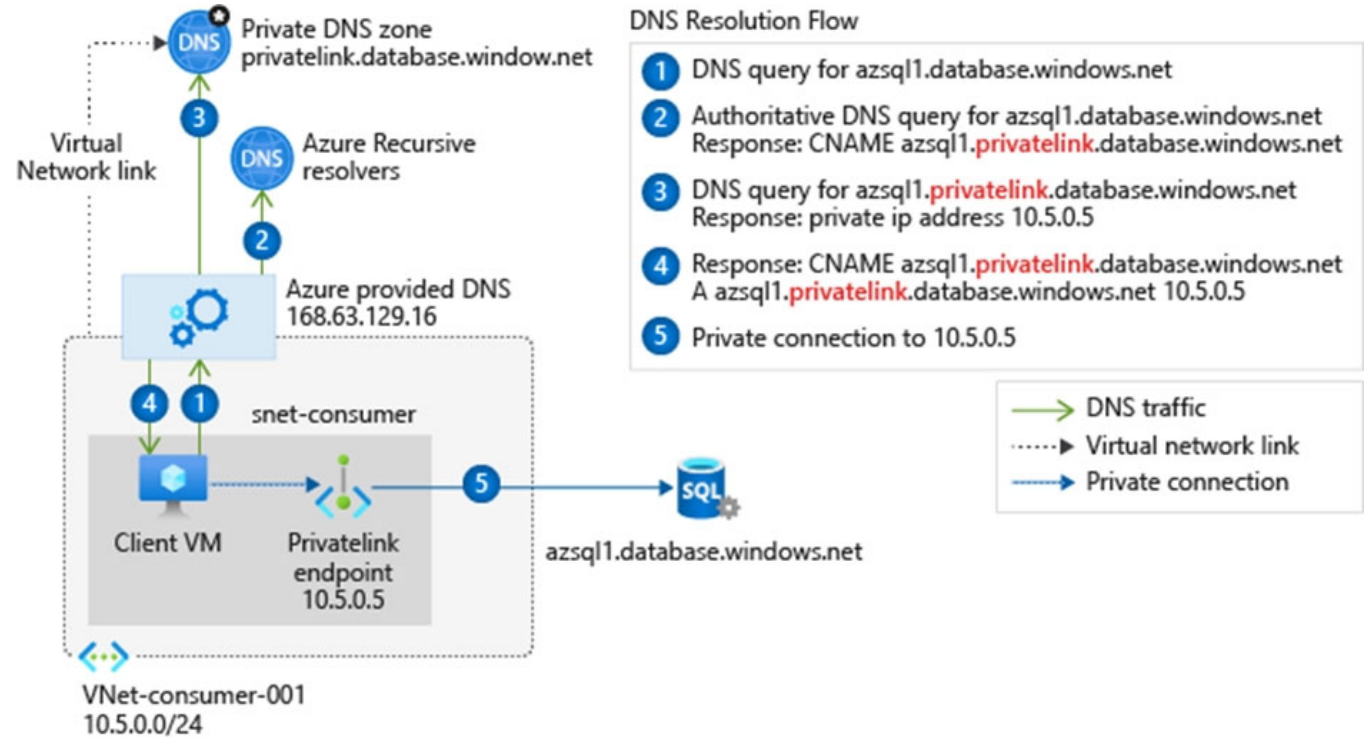
- Forward contoso.com to VM1
- Forward contoso.com to the public DNS zone
- Forward contoso.com to the Azure-provisioned DNS at 168.63.129.16

Box 1:In VNET1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

Virtual network workloads without custom DNS server.

This configuration is appropriate for virtual network workloads without a custom DNS server. In this scenario, the client queries for the private endpoint IP address to the Azure-provided DNS service 168.63.129.16. Azure DNS will be responsible for DNS resolution of the private DNS zones.

The following screenshot illustrates the DNS resolution sequence from virtual network workloads using the private DNS zone:



Box 2: Forward contoso.com to VM1

Forward to the DNS server VM1.

Note: You can use the following options to configure your DNS settings for private endpoints:

* Use the host file (only recommended for testing). You can use the host file on a virtual machine to override the DNS.
* Use a private DNS zone. You can use private DNS zones to override the DNS resolution for a private endpoint. A private DNS zone can be linked to your virtual network to resolve specific domains.
* Use your DNS forwarder (optional). You can use your DNS forwarder to override the DNS resolution for a private link resource. Create a DNS forwarding rule to use a private DNS zone on your DNS server hosted in a virtual network.

Reference:

https://docs.microsoft.com/en-us/azure/private-link/private-endpoint-dns

Question #37 *Topic 4*

You are designing a microservices architecture that will support a web application.
The solution must meet the following requirements:
⇨ Deploy the solution on-premises and to Azure.
Support low-latency and hyper-scale operations.
▪
⇨ Allow independent upgrades to each microservice.
⇨ Set policies for performing automatic repairs to the microservices.
You need to recommend a technology.
What should you recommend?

A. Azure Container Instance

B. Azure Logic App

C. Azure Service Fabric Most Voted

D. Azure virtual machine scale set

Correct Answer: *C*
Azure Service Fabric enables you to create Service Fabric clusters on premises or in other clouds.
Azure Service Fabric is low-latency and scales up to thousands of machines.
Reference:
https://azure.microsoft.com/en-us/services/service-fabric/

Community vote distribution
C (100%)

Question #38 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You plan to deploy multiple instances of an Azure web app across several Azure regions.
You need to design an access solution for the app. The solution must meet the following replication requirements:
- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Front Door to provide access to the app.
Does this meet the goal?

A. Yes Most Voted

B. No

Correct Answer: *A*
Azure Front Door meets the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.
Reference:
https://www.nginx.com/blog/nginx-plus-and-azure-load-balancers-on-microsoft-azure/ https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell

Community vote distribution
A (100%)

Question #39 *Topic 4*

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.
What should you include in the recommendation?

A. Azure Activity Log Most Voted

B. Azure Arc

C. Azure Analysis Services

D. Azure Monitor action groups

Correct Answer: *A*
Activity logs are kept for 90 days. You can query for any range of dates, as long as the starting date isn't more than 90 days in the past.
Through activity logs, you can determine:
- what operations were taken on the resources in your subscription
- who started the operation

when the operation occurred
-
- the status of the operation
- the values of other properties that might help you research the operation

Reference:
https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/view-activity-logs

Community vote distribution
A (100%)

Question #40 *Topic 4*

You have an Azure subscription.
You need to recommend a solution to provide developers with the ability to provision Azure virtual machines. The solution must meet the following requirements:
⇨ Only allow the creation of the virtual machines in specific regions.
⇨ Only allow the creation of specific sizes of virtual machines.
What should you include in the recommendation?

A. Attribute-based access control (ABAC)

B. Azure Policy Most Voted

C. Conditional Access policies

D. role-based access control (RBAC)

Correct Answer: *B*
Azure Policies allows you to specify allowed locations, and allowed VM SKUs.
Reference:
https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage

Community vote distribution
B (100%)

Question #41 *Topic 4*

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.
You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.
What should you include in the recommendation?

A. Azure Notification Hubs

B. Azure Data Lake

C. Azure Service Bus Most Voted

D. Azure Blob Storage

Correct Answer: *C*
Asynchronous messaging options.
There are different types of messages and the entities that participate in a messaging infrastructure. Based on the requirements of each message type, Microsoft recommends Azure messaging services. The options include Azure Service Bus, Event Grid, and Event Hubs.
Azure Service Bus queues are well suited for transferring commands from producers to consumers.
Data is transferred between different applications and services using messages. A message is a container decorated with metadata, and contains data. The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview

Community vote distribution
C (100%)

Question #42 *Topic 4*

You have 100 devices that write performance data to Azure Blob Storage.
You plan to store and analyze the performance data in an Azure SQL database.
You need to recommend a solution to continually copy the performance data to the Azure SQL database.
What should you include in the recommendation?

A. Azure Data Factory Most Voted

B. Data Migration Assistant (DMA)

C. Azure Data Box

D. Azure Database Migration Service

Correct Answer: *A*

Community vote distribution
A (100%)

Question #43 *Topic 4*

You need to recommend a storage solution for the records of a mission critical application. The solution must provide a Service Level Agreement (SLA) for the latency of write operations and the throughput.
What should you include in the recommendation?

A. Azure Data Lake Storage Gen2

B. Azure Blob Storage

C. Azure SQL

D. Azure Cosmos DB Most Voted

Correct Answer: *D*
Azure Cosmos DB is Microsoft's fast NoSQL database with open APIs for any scale. It offers turnkey global distribution across any number of Azure regions by transparently scaling and replicating your data wherever your users are. The service offers comprehensive 99.99% SLAs which covers the guarantees for throughput, consistency, availability and latency for the Azure Cosmos DB Database Accounts scoped to a single Azure region configured with any of the five
Consistency Levels or Database Accounts spanning multiple Azure regions, configured with any of the four relaxed Consistency Levels. Azure Cosmos DB allows configuring multiple Azure regions as writable endpoints for a Database Account. In this configuration, Azure Cosmos DB offers 99.999% SLA for both read and write availability.
Reference:
https://azure.microsoft.com/en-us/support/legal/sla/cosmos-db/v1_3/

Community vote distribution
D (100%)

Question #44 *Topic 4*

You are planning a storage solution. The solution must meet the following requirements:

- Support at least 500 requests per second.
- Support a large image, video, and audio streams.

Which type of Azure Storage account should you provision?

A. standard general-purpose v2 Most Voted

B. premium block blobs Most Voted

C. premium page blobs

D. premium file shares

Correct Answer: *B*

Use Azure Blobs if you want your application to support streaming and random access scenarios.

It's ideal for applications that require high transaction rates or consistent low-latency storage.

Incorrect:

Not A: Standard storage accounts has a default maximum request rate per storage account 20,000 requests per second1, but is not optimized for video and audio streams.

Not C: Page blobs is best suited for random reads and random writes.

Not D: FileStorage storage accounts (premium) has a maximum concurrent request rate of 100,000 IOPS.

Maximum file size is 4 TB, but is not optimized for video and audio streams.

Reference:

https://docs.microsoft.com/en-us/azure/storage/common/storage-introduction https://docs.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets

Community vote distribution

B (58%) A (42%)

Question #45 *Topic 4*

You need to recommend a data storage solution that meets the following requirements:
- Ensures that applications can access the data by using a REST connection
- Hosts 20 independent tables of varying sizes and usage patterns
- Automatically replicates the data to a second Azure region
- Minimizes costs

What should you recommend?

A. an Azure SQL Database elastic pool that uses active geo-replication

B. tables in an Azure Storage account that use geo-redundant storage (GRS) Most Voted

C. tables in an Azure Storage account that use read-access geo-redundant storage (RA-GRS)

D. an Azure SQL database that uses active geo-replication

Correct Answer: *B*
The Table service offers structured storage in the form of tables. The Table service API is a REST API for working with tables and the data that they contain.
Geo-redundant storage (GRS) has a lower cost than read-access geo-redundant storage (RA-GRS).
Reference:
https://docs.microsoft.com/en-us/rest/api/storageservices/table-service-rest-api https://docs.microsoft.com/en-us/azure/storage/common/geo-redundant-design

Community vote distribution
B (96%)

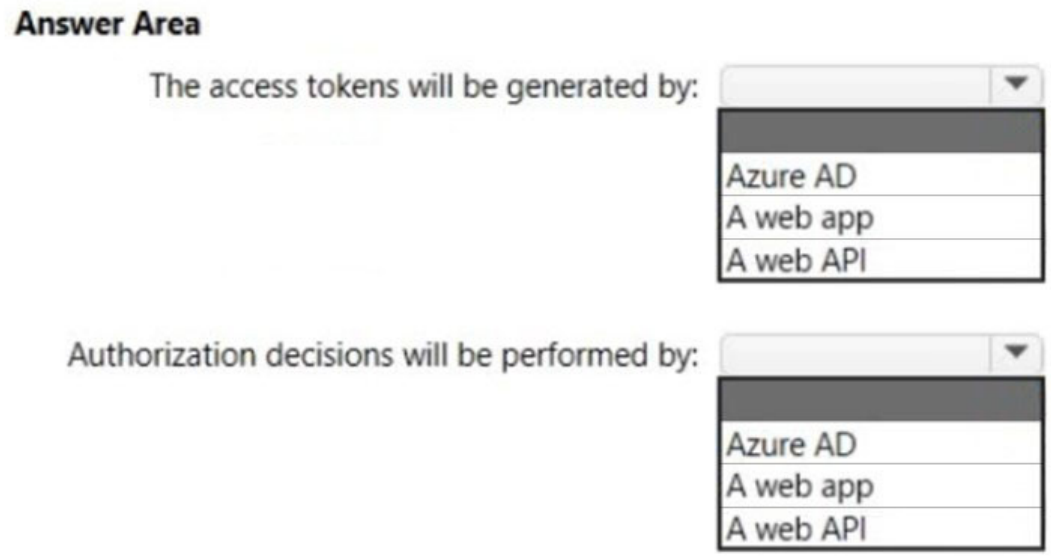
Question #46 *Topic 4*

HOTSPOT -
You are designing a software as a service (SaaS) application that will enable Azure Active Directory (Azure AD) users to create and publish online surveys. The
SaaS application will have a front-end web app and a back-end web API. The web app will rely on the web API to handle updates to customer surveys.
You need to design an authorization flow for the SaaS application. The solution must meet the following requirements:
- To access the back-end web API, the web app must authenticate by using OAuth 2 bearer tokens.
- The web app must authenticate by using the identities of individual users.

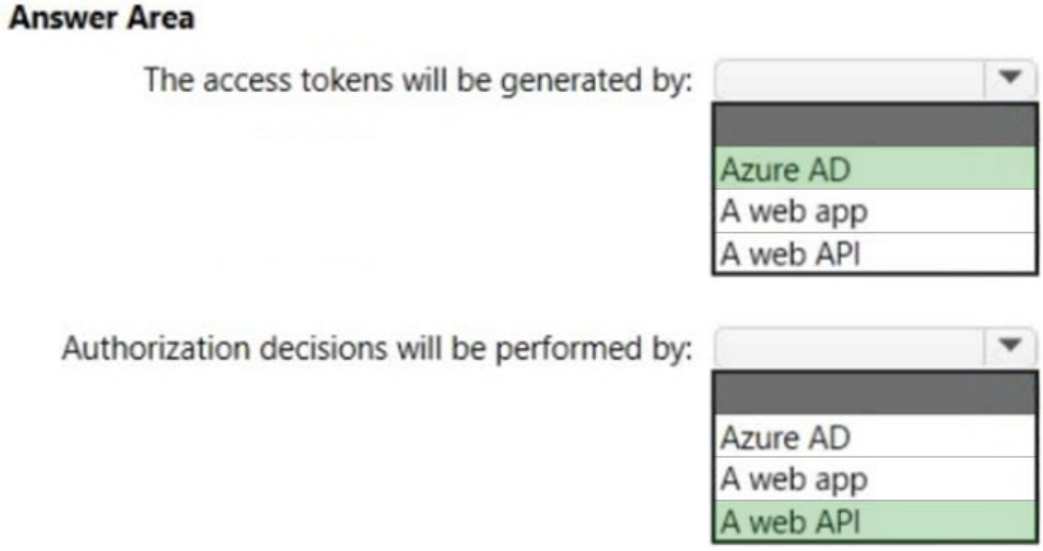
What should you include in the solution? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:



Correct Answer:



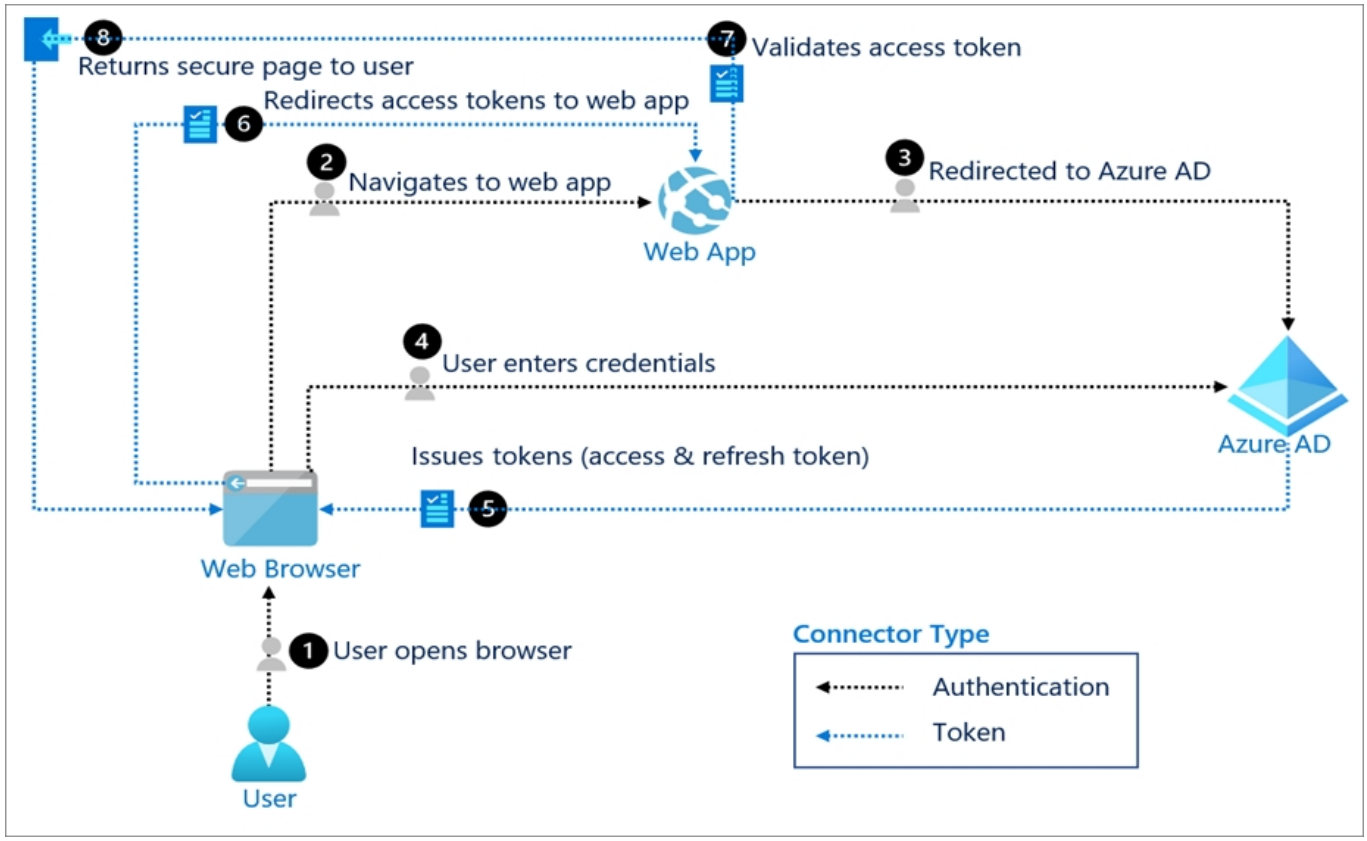
Box 1: Azure AD -

The Azure AD server issues tokens (access & refresh token). See step 5 below in graphic.

OAuth 2.0 authentication with Azure Active Directory.

The OAuth 2.0 is the industry protocol for authorization. It allows a user to grant limited access to its protected resources. Designed to work specifically with

Hypertext Transfer Protocol (HTTP), OAuth separates the role of the client from the resource owner. The client requests access to the resources controlled by the resource owner and hosted by the resource server (here the Azure AD server). The resource server issues access tokens with the approval of the resource owner. The client uses the access tokens to access the protected resources hosted by the resource server.



Box 2: A web API -
Delegated access is used.
The bearer token sent to the web API contains the user identity.
The web API makes authorization decisions based on the user identity.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/auth-oauth2 https://docs.microsoft.com/lb-lu/azure/architecture/multitenant-identity/web-api

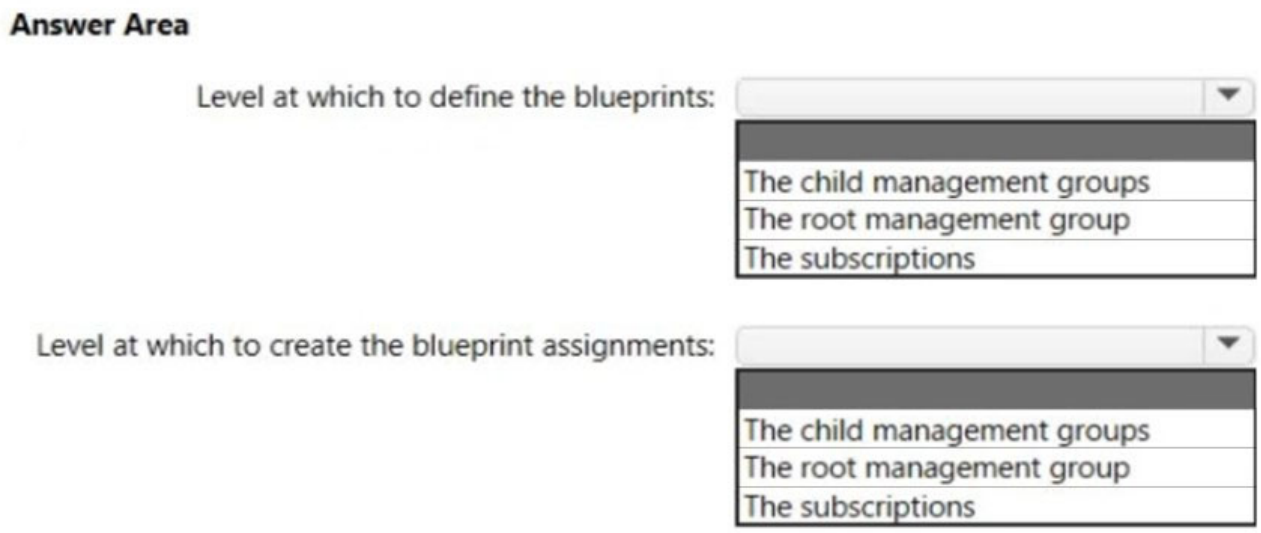
Question #47 *Topic 4*

HOTSPOT -
You plan to create an Azure environment that will contain a root management group and 10 child management groups. Each child management group will contain five Azure subscriptions. You plan to have between 10 and 30 resource groups in each subscription.
You need to design an Azure governance solution. The solution must meet the following requirements:
- Use Azure Blueprints to control governance across all the subscriptions and resource groups.
- Ensure that Blueprints-based configurations are consistent across all the subscriptions and resource groups.
- Minimize the number of blueprint definitions and assignments.

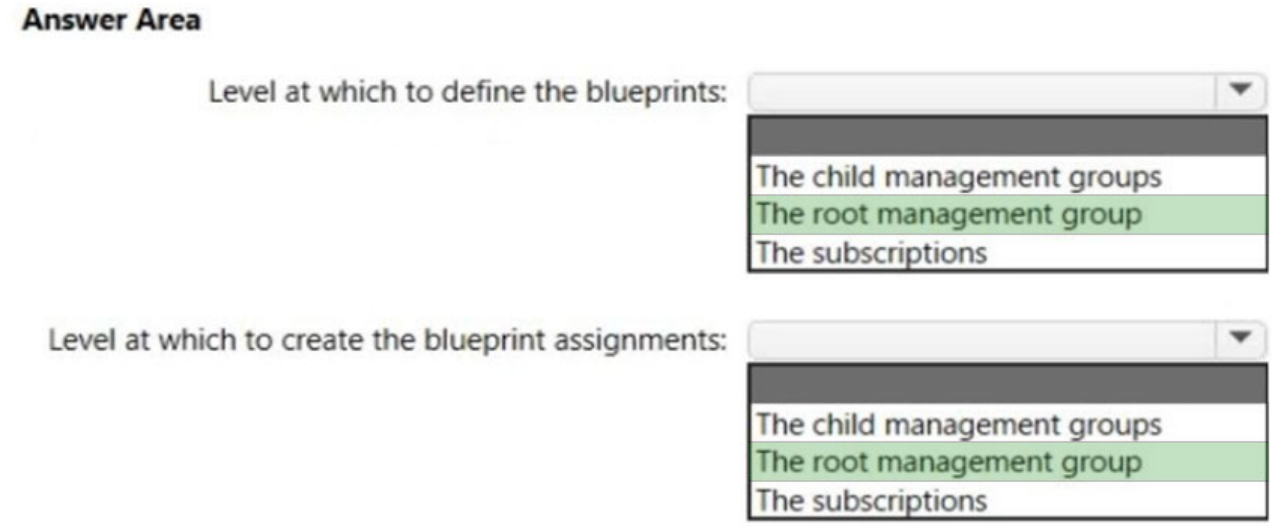
What should you include in the solution? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:



Correct Answer:



Box 1. The root management group

When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have

Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group.

The root management group is built into the hierarchy to have all management groups and subscriptions fold up to it. This root management group allows for global policies and Azure role assignments to be applied at the directory level.

Box 2. The root management group

Reference:

https://docs.microsoft.com/en-us/azure/governance/management-groups/overview https://docs.microsoft.com/en-us/azure/governance/blueprints/overview

Question #48 *Topic 4*

DRAG DROP -
You are designing a virtual machine that will run Microsoft SQL Server and contain two data disks. The first data disk will store log files, and the second data disk will store data. Both disks are P40 managed disks.
You need to recommend a host caching method for each disk. The method must provide the best overall performance for the virtual machine while preserving the integrity of the SQL data and logs.
Which host caching method should you recommend for each disk? To answer, drag the appropriate methods to the correct disks. Each method may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.
NOTE: Each correct selection is worth one point.
Select and Place:

Correct Answer:

Box 1: None -
No data disk caching for the Log files.

Box 2: ReadOnly -
Guidelines to optimize performance for your SQL Server on Azure Virtual Machines (VMs) include:
Set host caching to read-only for data file disks.
Set host caching to none for log file disks.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/performance-guidelines-best-practices-storage

Question #49 *Topic 4*

You are designing a solution that calculates 3D geometry from height-map data.
You need to recommend a solution that meets the following requirements:
⇨ Performs calculations in Azure.
⇨ Ensures that each node can communicate data to every other node.
⇨ Maximizes the number of nodes to calculate multiple scenes as fast as possible.
Minimizes the amount of effort to implement the solution.
▪
Which two actions should you include in the recommendation? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Enable parallel file systems on Azure.

B. Create a render farm that uses virtual machines.

C. Create a render farm that uses virtual machine scale sets.

D. Create a render farm that uses Azure Batch. Most Voted

E. Enable parallel task execution on compute nodes. Most Voted

Correct Answer: *DE*
Multi-instance tasks allow you to run an Azure Batch task on multiple compute nodes simultaneously. These tasks enable high performance computing scenarios like Message Passing Interface (MPI) applications in Batch.
You configure compute nodes for parallel task execution at the pool level.
Azure Batch allows you to set task slots per node up to (4x) the number of node cores.
Reference:
https://docs.microsoft.com/en-us/azure/batch/batch-mpi
https://docs.microsoft.com/en-us/azure/batch/batch-parallel-node-tasks#enable-parallel-task-execution

Community vote distribution
DE (98%)

Question #50 *Topic 4*

You have an on-premises application that consumes data from multiple databases. The application code references database tables by using a combination of the server, database, and table name.
You need to migrate the application data to Azure.
To which two services can you migrate the application data to achieve the goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. SQL Server Stretch Database

B. SQL Server on an Azure virtual machine Most Voted

C. Azure SQL Database

D. Azure SQL Managed Instance Most Voted

Correct Answer: *BD*
Cross-database queries are supported by SQL Server, for example on an Azure virtual machine, and also supported by an Azure SQL Managed Instance.
Reference:
https://techcommunity.microsoft.com/t5/azure-database-support-blog/cross-database-queries-between-azure-sql-database-and-managed/ba-p/2706670

Community vote distribution
BD (100%)

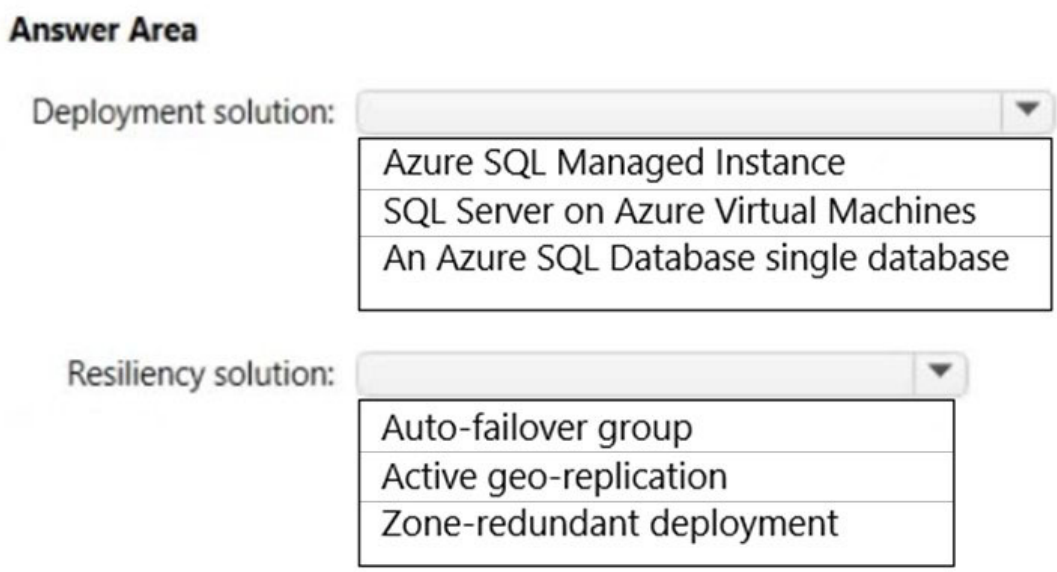
Question #51 *Topic 4*

HOTSPOT -
You plan to migrate on-premises Microsoft SQL Server databases to Azure.
You need to recommend a deployment and resiliency solution that meets the following requirements:
- Supports user-initiated backups
- Supports multiple automatically replicated instances across Azure regions
- Minimizes administrative effort to implement and maintain business continuity

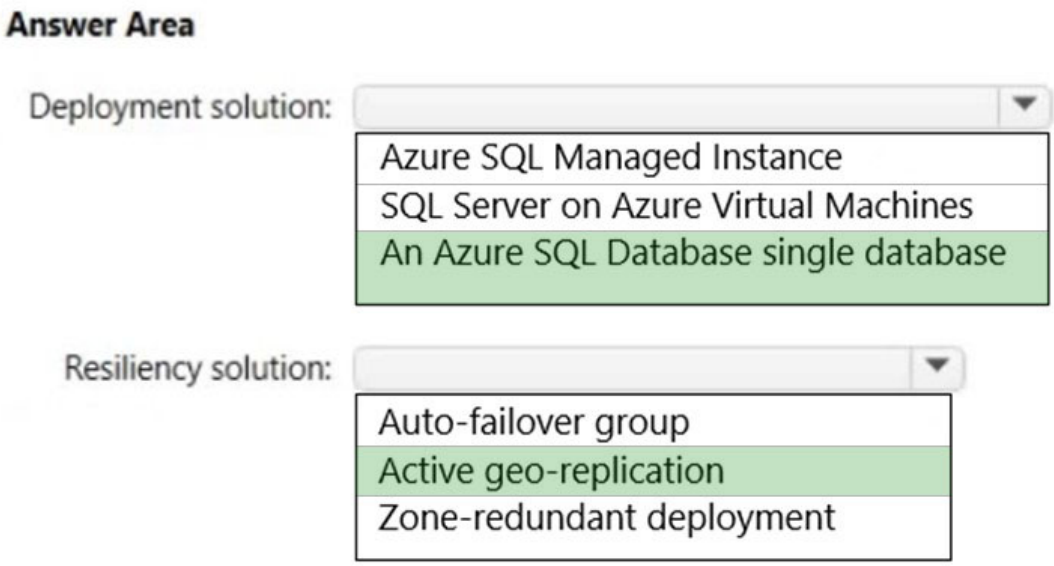
What should you recommend? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:



Correct Answer:



Box 1: an Azure SQL database -

Incorrect answers:

User imitated backups are not supported by Azure SQL Managed instance.

Box 2: Active geo-replication -

Active geo-replication required to multiple automatically replicated instances across Azure regions.

You can manage Azure SQL Database security for geo-restore. SQL database cannot be used for geo-restore.

Incorrect:

Not SQL Server: Active geo-replication requires Azure SQL database.

Reference:

https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview

Question #52 *Topic 4*

You need to design a highly available Azure SQL database that meets the following requirements:
- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

A. Azure SQL Managed Instance Business Critical

B. Azure SQL Managed Instance General Purpose

C. Azure SQL Database Business Critical

D. Azure SQL Database Serverless Most Voted

Correct Answer: *D*
Azure SQL Database Serverless meets the requirements and is less expensive than Azure SQL Database Business Critical.
Note: General Purpose service tier zone redundant availability.
Zone-redundant configuration for the general purpose service tier is offered for both serverless and provisioned compute.
This configuration utilizes Azure Availability Zones λ€‰to replicate databases across multiple physical locations within an Azure region.λ€‰By selecting zone-redundancy, you can make yourλ€‰new and existing serverless and provisioned generalλ€‰purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.
Incorrect:
Not A, not B: Zone-redundant configuration is not available in SQL Managed Instance.
Not C: Azure SQL Database Business Critical is more expensive than Azure SQL Database Serverless.
Note: Premium and Business Critical service tiers use the Premium availability model, which integrates compute resources (sqlservr.exe process) and storage
(locally attached SSD) on a single node. High availability is achieved by replicating both compute and storage to additional nodes creating a three to four-node cluster.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla

Community vote distribution
D (87%) 13%

Question #53 *Topic 4*

You have an Azure web app that uses an Azure key vault named KeyVault1 in the West US Azure region.
You are designing a disaster recovery plan for KeyVault1.
You plan to back up the keys in KeyVault1.
You need to identify to where you can restore the backup.
What should you identify?

A. any region worldwide

B. the same region only

C. KeyVault1 only

D. the same geography only Most Voted

Correct Answer: *D*
Using the backup and restore commands has two limitations:
* You can't back up a key vault in one geography and restore it into another geography.
* The backup command backs up all versions of each secret.
Incorrect:
Not A: Azure Key Vault does not allow you to move a key vault from one region to another. You can, however, create a key vault in the new region, manually copy each individual key, secret, or certificate from your existing key vault to the new key vault, and then remove the original key vault.
Reference:
https://docs.microsoft.com/en-us/azure/key-vault/general/move-region

Community vote distribution
D (100%)

Question #54 *Topic 4*

You have an on-premises line-of-business (LOB) application that uses a Microsoft SQL Server instance as the backend.
You plan to migrate the on-premises SQL Server instance to Azure virtual machines.
You need to recommend a highly available SQL Server deployment that meets the following requirements:
⇨ Minimizes costs
Minimizes failover time if a single server fails
▪
What should you include in the recommendation?

A. an Always On availability group that has premium storage disks and a virtual network name (VNN)

B. an Always On Failover Cluster Instance that has a virtual network name (VNN) and a standard file share

C. an Always On availability group that has premium storage disks and a distributed network name (DNN) Most Voted

D. an Always On Failover Cluster Instance that has a virtual network name (VNN) and a premium file share

Correct Answer: *C*
Always On availability groups on Azure Virtual Machines are similar to Always On availability groups on-premises, and rely on the underlying Windows Server
Failover Cluster.
If you deploy your SQL Server VMs to a single subnet, you can configure a virtual network name (VNN) and an Azure Load Balancer, or a distributed network name (DNN) to route traffic to your availability group listener.
There are some behavior differences between the functionality of the VNN listener and DNN listener that are important to note:
* Failover time: Failover time is faster when using a DNN listener since there is no need to wait for the network load balancer to detect the failure event and change its routing.
* Etc.
Incorrect:
Not B, not D: Migrate to an Always On availability group, not an Always on Failover cluster Instance.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/availability-group-overview

Community vote distribution
C (67%) B (33%)

Question #55 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
Your company plans to deploy various Azure App Service instances that will use Azure SQL databases. The App Service instances will be deployed at the same time as the Azure SQL databases.
The company has a regulatory requirement to deploy the App Service instances only to specific Azure regions. The resources for the App Service instances must reside in the same region.
You need to recommend a solution to meet the regulatory requirement.
Solution: You recommend creating resource groups based on locations and implementing resource locks on the resource groups.
Does this meet the goal?

A. Yes

B. No Most Voted

Correct Answer: *B*
Instead; you should recommend using an Azure Policy initiative to enforce the location
Note: Azure Resource Policy Definitions can be used which can be applied to a specific Resource Group with the App Service instances.
In Azure Policy, we offer several built-in policies that are available by default. For example:
* Allowed Locations (Deny): Restricts the available locations for new resources. Its effect is used to enforce your geo-compliance requirements.
Reference:
https://docs.microsoft.com/en-us/azure/governance/policy/overview

Community vote distribution
B (100%)

Question #56 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
Your company plans to deploy various Azure App Service instances that will use Azure SQL databases. The App Service instances will be deployed at the same time as the Azure SQL databases.
The company has a regulatory requirement to deploy the App Service instances only to specific Azure regions. The resources for the App Service instances must reside in the same region.
You need to recommend a solution to meet the regulatory requirement.
Solution: You recommend using the Regulatory compliance dashboard in Microsoft Defender for Cloud.
Does this meet the goal?

A. Yes

B. No Most Voted

Correct Answer: *B*
Instead; you should recommend using an Azure Policy initiative to enforce the location
Note: Azure Resource Policy Definitions can be used which can be applied to a specific Resource Group with the App Service instances.
In Azure Policy, we offer several built-in policies that are available by default. For example:
* Allowed Locations (Deny): Restricts the available locations for new resources. Its effect is used to enforce your geo-compliance requirements.
Reference:
https://docs.microsoft.com/en-us/azure/governance/policy/overview

Community vote distribution
B (100%)

Question #57 *Topic 4*

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
Your company plans to deploy various Azure App Service instances that will use Azure SQL databases. The App Service instances will be deployed at the same time as the Azure SQL databases.
The company has a regulatory requirement to deploy the App Service instances only to specific Azure regions. The resources for the App Service instances must reside in the same region.
You need to recommend a solution to meet the regulatory requirement.
Solution: You recommend using an Azure Policy initiative to enforce the location.
Does this meet the goal?

A. Yes Most Voted

B. No

Correct Answer: *A*
Azure Resource Policy Definitions can be used which can be applied to a specific Resource Group with the App Service instances.
In Azure Policy, we offer several built-in policies that are available by default. For example:
* Allowed Locations (Deny): Restricts the available locations for new resources. Its effect is used to enforce your geo-compliance requirements.
Reference:
https://docs.microsoft.com/en-us/azure/governance/policy/overview

Community vote distribution
A (100%)

Question #58 *Topic 4*

You plan to move a web app named App1 from an on-premises datacenter to Azure.
App1 depends on a custom COM component that is installed on the host server.
You need to recommend a solution to host App1 in Azure. The solution must meet the following requirements:
⇨ App1 must be available to users if an Azure datacenter becomes unavailable.
⇨ Costs must be minimized.
What should you include in the recommendation?

A. In two Azure regions, deploy a load balancer and a web app.

B. In two Azure regions, deploy a load balancer and a virtual machine scale set.

C. Deploy a load balancer and a virtual machine scale set across two availability zones. Most Voted

D. In two Azure regions, deploy an Azure Traffic Manager profile and a web app.

Correct Answer: *C*
Need to use a virtual machine as Azure App service does not allow COM components.
Need two availability zones to protect against an Azure datacenter failure.
Incorrect:
Not A, Not D: Cannot use a web app.
Azure App Service does not allow the registration of COM components on the platform. If your app makes use of any COM components, these need to be rewritten in managed code and deployed with the site or application.
Reference:
https://docs.microsoft.com/en-us/dotnet/azure/migration/app-service#com-and-com-components

Community vote distribution
C (100%)

Question #59 *Topic 4*

You plan to deploy an application named App1 that will run in containers on Azure Kubernetes Service (AKS) clusters. The AKS clusters will be distributed across four Azure regions.
You need to recommend a storage solution to ensure that updated container images are replicated automatically to all the Azure regions hosting the AKS clusters.
Which storage solution should you recommend?

A. geo-redundant storage (GRS) accounts

B. Premium SKU Azure Container Registry Most Voted

C. Azure Content Delivery Network (CDN)

D. Azure Cache for Redis

Correct Answer: *B*
Enable geo-replication for container images.
Best practice: Store your container images in Azure Container Registry and geo-replicate the registry to each AKS region.
To deploy and run your applications in AKS, you need a way to store and pull the container images. Container Registry integrates with AKS, so it can securely store your container images or Helm charts. Container Registry supports multimaster geo-replication to automatically replicate your images to Azure regions around the world.
Geo-replication is a feature of Premium SKU container registries.
Note:
When you use Container Registry geo-replication to pull images from the same region, the results are:
Faster: You pull images from high-speed, low-latency network connections within the same Azure region.
More reliable: If a region is unavailable, your AKS cluster pulls the images from an available container registry.
Cheaper: There's no network egress charge between datacenters.
Reference:
https://docs.microsoft.com/en-us/azure/aks/operator-best-practices-multi-region

Community vote distribution
B (100%)

Question #60 *Topic 4*

You have an Azure Active Directory (Azure AD) tenant.
You plan to deploy Azure Cosmos DB databases that will use the SQL API.
You need to recommend a solution to provide specific Azure AD user accounts with read access to the Cosmos DB databases.
What should you include in the recommendation?

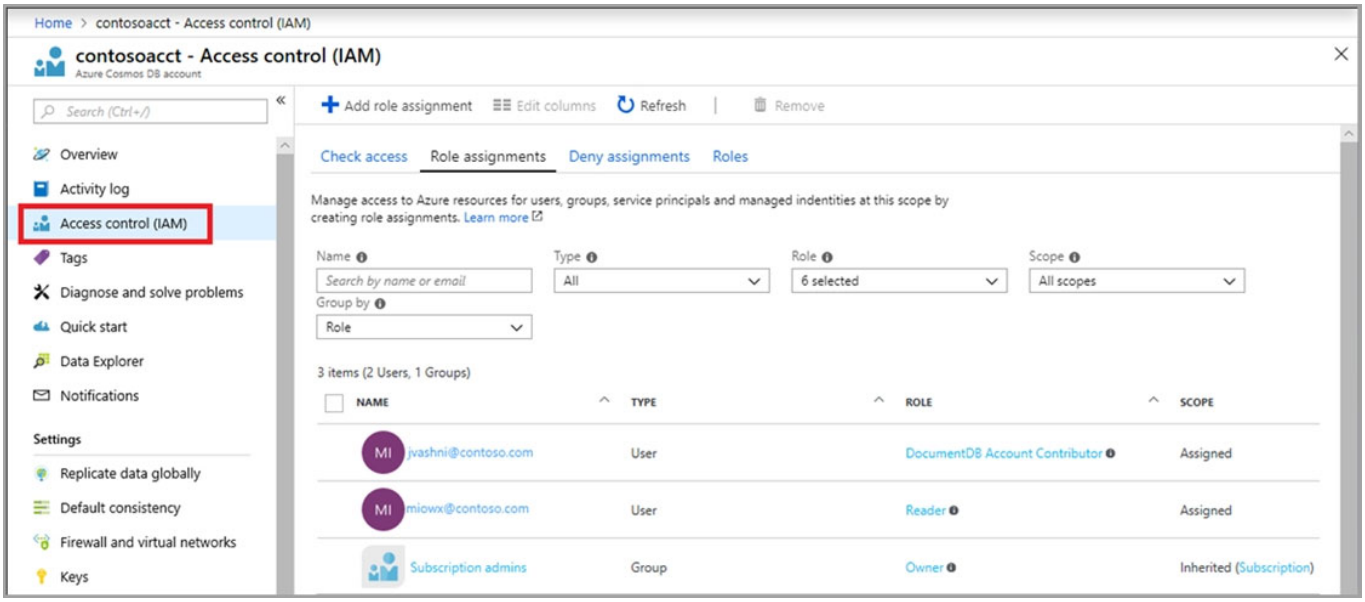
A. shared access signatures (SAS) and Conditional Access policies

B. certificates and Azure Key Vault

C. master keys and Azure Information Protection policies

D. a resource token and an Access control (IAM) role assignment Most Voted

Correct Answer: *D*
The Access control (IAM) pane in the Azure portal is used to configure role-based access control on Azure Cosmos resources. The roles are applied to users, groups, service principals, and managed identities in Active Directory. You can use built-in roles or custom roles for individuals and groups. The following screenshot shows Active Directory integration (RBAC) using access control (IAM) in the Azure portal:



Note: To use the Azure Cosmos DB RBAC in your application, you have to update the way you initialize the Azure Cosmos DB SDK. Instead of passing your account's primary key, you have to pass an instance of a TokenCredential class. This instance provides the Azure Cosmos DB SDK with the context required to fetch an Azure AD (AAD) token on behalf of the identity you wish to use.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/role-based-access-control https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-setup-rbac

Community vote distribution
D (100%)

Question #61 *Topic 4*

You need to recommend an Azure Storage solution that meets the following requirements:
⇨ The storage must support 1 PB of data.
⇨ The data must be stored in blob storage.
⇨ The storage must support three levels of subfolders.
⇨ The storage must support access control lists (ACLs).
What should you include in the recommendation?

A. a premium storage account that is configured for block blobs

B. a general purpose v2 storage account that has hierarchical namespace enabled Most Voted

C. a premium storage account that is configured for page blobs

D. a premium storage account that is configured for file shares and supports large file shares

Correct Answer: *B*
Default limits for Azure general-purpose v2 (GPv2), general-purpose v1 (GPv1), and Blob storage accounts include:
* Default maximum storage account capacity: 5 PiB
Blob storage supports Azure Data Lake Storage Gen2, Microsoft's enterprise big data analytics solution for the cloud. Azure Data Lake Storage Gen2 offers a hierarchical file system as well as the advantages of Blob storage.
Blob storage supports Azure Data Lake Storage Gen2, Microsoft's enterprise big data analytics solution for the cloud. Azure Data Lake Storage Gen2 offers a hierarchical file system as well as the advantages of Blob storage
Incorrect:
Not D: In a Premium FileStorage account, storage size is limited to 100 TB.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/azure-subscription-service-limits#storage-limits

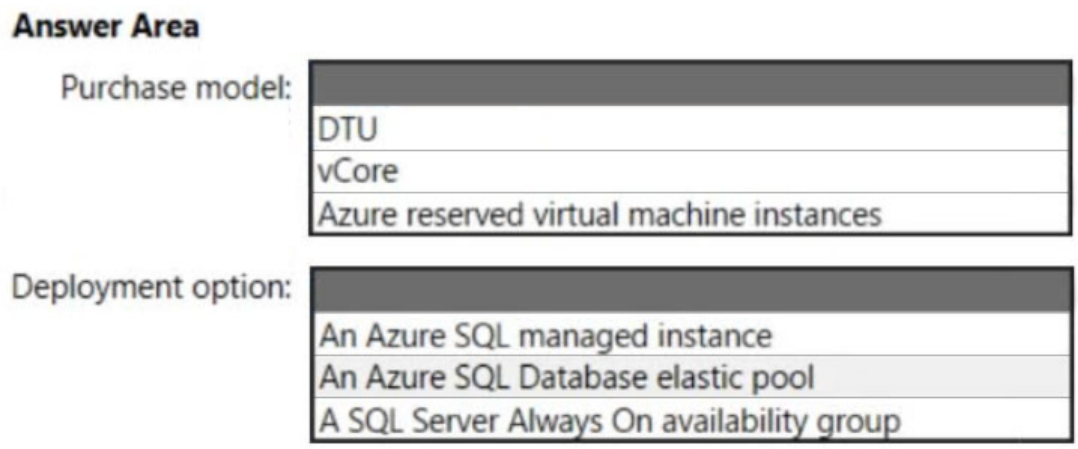
Community vote distribution
B (100%)

Question #62 *Topic 4*

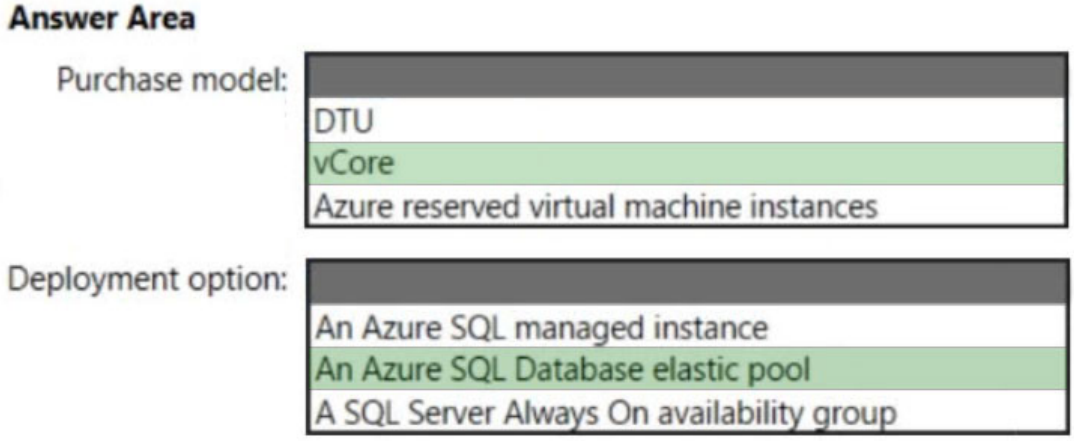
HOTSPOT -
You manage a database environment for a Microsoft Volume Licensing customer named Contoso, Ltd. Contoso uses License Mobility through Software
Assurance.
You need to deploy 50 databases. The solution must meet the following requirements:
⇨ Support automatic scaling.
⇨ Minimize Microsoft SQL Server licensing costs.
What should you include in the solution? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:



Correct Answer:



Box 1: vCore -

You can only apply the Azure Hybrid licensing model when you choose a vCore-based purchasing model and the provisioned compute tier for your Azure SQL

Database. Azure Hybrid Benefit isn't available for service tiers under the DTU-based purchasing model or for the serverless compute tier.

Box 2: An Azure SQL Database elastic pool

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price. Elastic pools in SQL Database enable software as a service (SaaS) developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

Reference:

https://docs.microsoft.com/en-us/azure/azure-sql/azure-hybrid-benefit https://docs.microsoft.com/ko-kr/azure/azure-sql/database/elastic-pool-overview

Question #63 *Topic 4*

You have an on-premises application named App1 that uses an Oracle database.
You plan to use Azure Databricks to transform and load data from App1 to an Azure Synapse Analytics instance.
You need to ensure that the App1 data is available to Databricks.
Which two Azure services should you include in the solution? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Azure Data Box Gateway
B. Azure Import/Export service
C. Azure Data Lake Storage Most Voted
D. Azure Data Box Edge
E. Azure Data Factory Most Voted

Correct Answer: *BE*
Data Factory is a data integration service that provides a low-code or no-code approach to construct extract, transform, and load (ETL) processes within a visual environment or by writing your own code.
Exporting data, either to another data technology or to another Dataverse environment, can use any of the same technologies for importing data, such as dataflows, Data Factory, Power Query, and Power Automate.
Reference:
https://docs.microsoft.com/en-us/power-apps/maker/data-platform/import-export-data

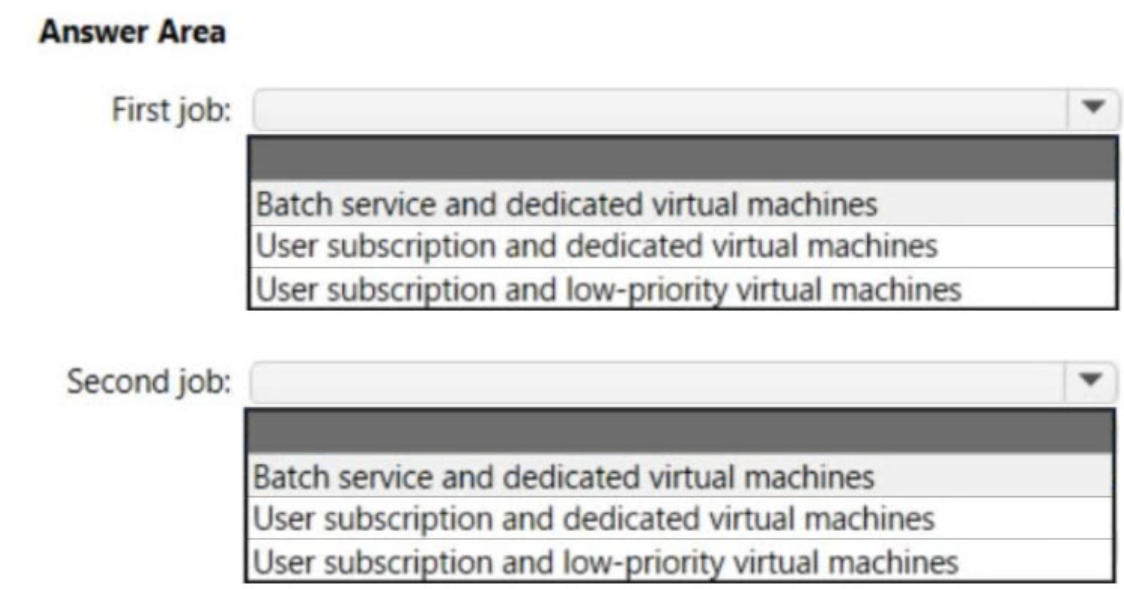
Community vote distribution
CE (86%) 14%

Question #64 *Topic 4*

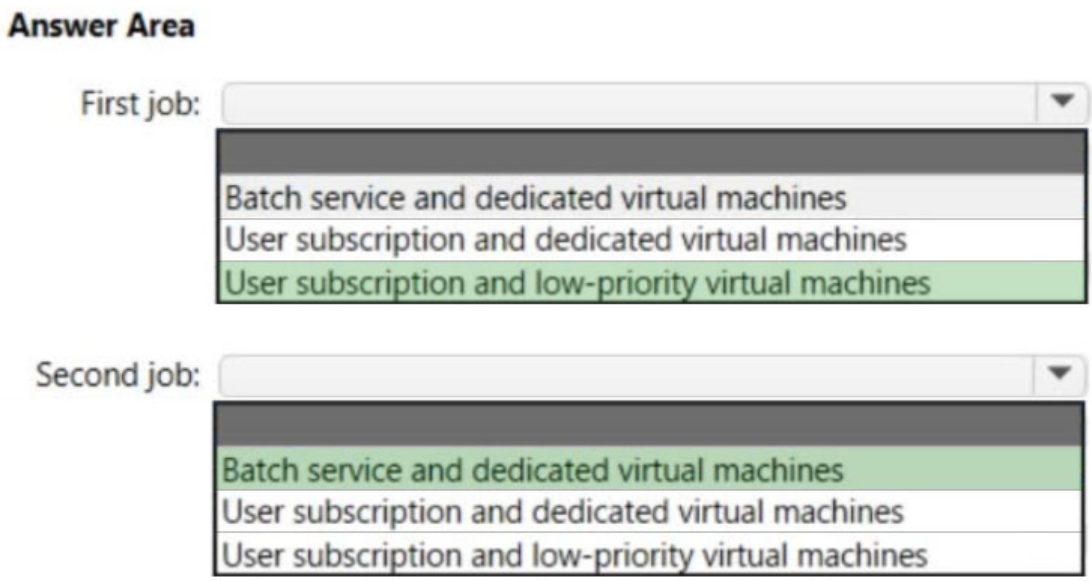
HOTSPOT -
You are designing a cost-optimized solution that uses Azure Batch to run two types of jobs on Linux nodes. The first job type will consist of short-running tasks for a development environment. The second job type will consist of long-running Message Passing Interface (MPI) applications for a production environment that requires timely job completion.
You need to recommend the pool type and node type for each job type. The solution must minimize compute charges and leverage Azure Hybrid Benefit whenever possible.
What should you recommend? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:



Correct Answer:



Box 1: User subscription and low-priority virtual machines

The first job type will consist of short-running tasks for a development environment.

Among the many ways to purchase and consume Azure resources are Azure low priority VMs and Spot VMs. These virtual machines are compute instances allocated from spare capacity, offered at a highly discounted rate compared to λ€on demandλ€ VMs. This means they can be a great option for cost savings λ€" for the right workloads

Box 2: Batch service and dedicate virtual machines

The second job type will consist of long-running Message Passing Interface (MPI) applications for a production environment that requires timely job completion.

Azure Batch Service is a cloud based job scheduling and compute management platform that enables running large-scale parallel and high performance computing applications efficiently in the cloud. Azure Batch Service provides job scheduling and in automatically scaling and managing virtual machines running those jobs.

Reference:

https://www.parkmycloud.com/blog/azure-low-priority-vms

https://azure.microsoft.com/en-us/pricing/details/batch/

Question #65 *Topic 4*

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.
You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.
What should you include in the recommendation?

A. Azure Notification Hubs

B. Azure Service Fabric

C. Azure Queue Storage Most Voted

D. Azure Data Lake

Correct Answer: *C*
Queue Storage delivers asynchronous messaging between application components, whether they are running in the cloud, on the desktop, on an on-premises server, or on a mobile device.
The maximum message size supported by Azure Storage Queues is 64KB while Azure Service Bus Queues support messages up to 256KB. This becomes an important factor especially when the message format is padded (such as XML).
Reference:
https://docs.microsoft.com/en-us/azure/storage/queues/storage-dotnet-how-to-use-queues https://blog.kloud.com.au/2016/03/01/cloud-cushioning-using-azure-queues/

Community vote distribution

C (95%) 5%

Question #66 *Topic 4*

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.
You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.
What should you include in the recommendation?

A. Azure Notification Hubs

B. Azure Service Fabric

C. Azure Queue Storage Most Voted

D. Azure Application Gateway

Correct Answer: *C*
Queue storage is often used to create a backlog of work to process asynchronously.
A queue message must be in a format compatible with an XML request using UTF-8 encoding.
Reference:
https://docs.microsoft.com/en-us/azure/storage/queues/storage-tutorial-queues

Community vote distribution
C (90%) 10%

Previous Questions Next Questions