- **Vendor: Microsoft**
- **Exam Code: AZ-305**
- **Exam Name: Designing Microsoft Azure Infrastructure Solutions**
- **Part of New Questions from PassLeader (Updated in Feb/2022)**

NEW QUESTION 110
Your company, named Contoso, Ltd., implements several Azure logic apps that have HTTP triggers. The logic apps provide access to an on-premises web service. Contoso establishes a partnership with another company named Fabrikam, Inc. Fabrikam does not have an existing Azure Active Directory (Azure AD) tenant and uses third-party OAuth 2.0 identity management to authenticate its users. Developers at Fabrikam plan to use a subset of the logic apps to build applications that will integrate with the on-premises web service of Contoso. You need to design a solution to provide the Fabrikam developers with access to the logic apps. The solution must meet the following requirements:
- Requests to the logic apps from the developers must be limited to lower rates than the requests from the users at Contoso.
- The developers must be able to rely on their existing OAuth 2.0 provider to gain access to the logic apps.
- The solution must NOT require changes to the logic apps.
- The solution must NOT use Azure AD guest accounts.
What should you include in the solution?

A. Azure AD Business-to-Business (B2B)
B. Azure AD Application Proxy
C. Azure Front Door
D. Azure API Management

Answer: D
Explanation:
API Management helps organizations publish APIs to external, partner, and internal developers to unlock the potential of their data and services. You can secure API Management using the OAuth 2.0 client credentials flow.
https://docs.microsoft.com/en-us/azure/api-management/api-management-key-concepts
https://docs.microsoft.com/en-us/azure/api-management/api-management-features
https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad#enable-oauth-20-user-authorization-in-the-developer-console

NEW QUESTION 111
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. virtual kubetet
B. cluster autoscaler
C. virtual nodes
D. horizontal pod autoscaler

Answer: C
Explanation:
https://docs.microsoft.com/en-us/azure/aks/virtual-nodes

NEW QUESTION 112
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. horizontal pod autoscaler
B. kubernetes version 1.20.2 or newer
C. cluster autoscaler
D. virtual nodes
E. with virtual kubelet ACI

Answer: C
Explanation:
https://docs.microsoft.com/en-us/azure/aks/cluster-autoscaler#about-the-cluster-autoscaler

NEW QUESTION 113
You plan to deploy 10 applications to Azure. The applications will be deployed to two Azure Kubernetes Service (AKS) clusters. Each cluster will be deployed to a separate Azure region. The application deployment must meet the following requirements:
- Ensure that the applications remain available if a single AKS cluster fails.
- Ensure that the connection traffic over the internet is encrypted by using SSL without having to configure SSL on each container.
Which service should you include in the recommendation?

A. AKS Ingress Controller
B. Azure Traffic Manager
C. Azure Front Door
D. Azure Load Balancer

Answer: C

NEW QUESTION 114
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. Conditional Access Policies
B. Role-based Access Control (RBAC)
C. Azure Resource Manager (ARM) Templates
D. Azure Policy

Answer: D
Explanation:
https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage
https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/manage/azure-server-management/common-policies#restrict-vm-size

NEW QUESTION 115
You plan to deploy an application named App1 that will run on five Azure virtual machines. Additional virtual machines will be deployed later to run App1. You need to recommend a solution to meet the following requirements for the virtual machines that will run App1:
- Ensure that the virtual machines can authenticate to Azure Active Directory (Azure AD) to gain access to an Azure key vault, Azure Logic Apps instances, and an Azure SQL database.
- Avoid assigning new roles and permissions for Azure services when you deploy additional virtual machines.
- Avoid storing secrets and certificates on the virtual machines.
Which type of identity should you include in the recommendation?

A. a service principal that is configured to use a certificate
B. a system-assigned managed identity
C. a service principal that is configured to use a client secret
D. a user-assigned managed identity

Answer: D
Explanation:
Managed identities for Azure resources is a feature of Azure Active Directory. User-assigned managed identity can be shared. The same user-assigned managed identity can be associated with more than one Azure resource.
Incorrect:
Not B: System-assigned managed identity cannot be shared. It can only be associated with a single Azure resource.
https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview

NEW QUESTION 116
You have an application that is used by 6,000 users to validate their vacation requests. The application manages its own credential. Users must enter a username and password to access the application. The application does NOT support identity providers. You plan to upgrade the application to use single sign-on (SSO) authentication by using an Azure Active Directory (Azure AD) application registration. Which SSO method should you use?

A. password-based
B. OpenID Connect
C. header-based
D. SAML

Answer: A

NEW QUESTION 117
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 Data Box Gateway
B. Azure Databricks

C. Azure Data Factory
D. Azure Storage Sync

Answer: C
Explanation:
You can use Copy Activity in Azure Data Factory to copy data from and to Azure Data Lake Storage Gen2, and use Data Flow to transform data in Azure Data Lake Storage Gen2.
https://docs.microsoft.com/en-us/azure/data-factory/connector-azure-data-lake-storage

NEW QUESTION 118
You plan to deploy an app that will use an Azure Storage account. You need to deploy the storage account. The solution must meet the following requirements:
- Store the data of multiple users.
- Encrypt each user's data by using a separate key.
- Encrypt all the data in the storage account by using Microsoft keys or customer-managed keys.
What should you deploy?

A. files in a general purpose v2 storage account
B. blobs in an Azure Data Lake Storage Gen2 account
C. files in a premium file share storage account
D. blobs in a general purpose v2 storage account

Answer: B

NEW QUESTION 119
You plan to deploy an Azure SQL database that will store Personally Identifiable Information (PII). You need to ensure that only privileged users can view the PII. What should you include in the solution?

A. Transparent Data Encryption (TDE)
B. Data Discovery & Classification
C. Dynamic Data Masking
D. Role-Based Access Control (RBAC)

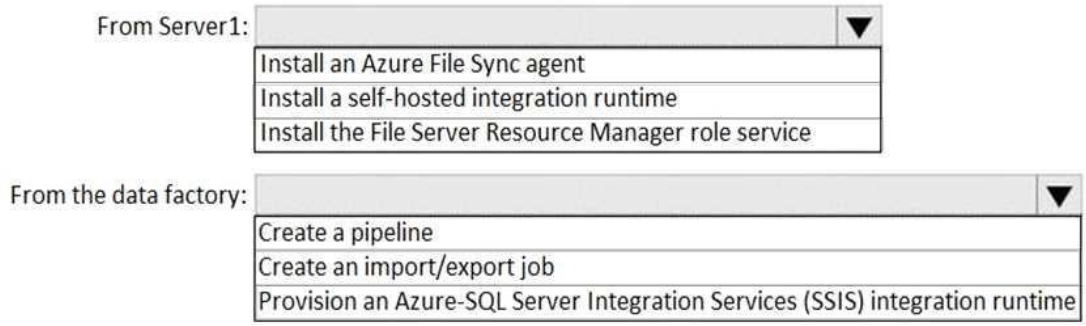
Answer: D

NEW QUESTION 120
You store web access logs data in Azure Blob storage. You plan to generate monthly reports from the access logs. You need to recommend an automated process to upload the data to Azure SQL Database every month. What should you include in the recommendation?

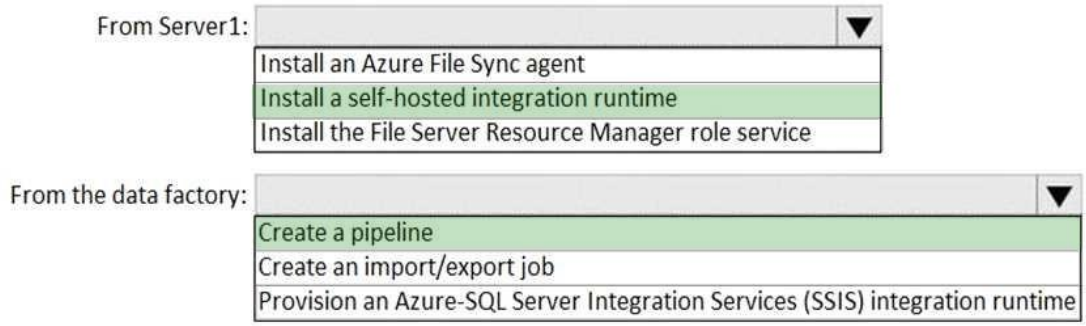
A. Azure Data Factory
B. Data Migration Assistant
C. Microsoft SQL Server Migration Assistant (SSMA)
D. AzCopy

Answer: A
Explanation:
Azure Data Factory is the platform that solves such data scenarios. It 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. You can build complex ETL processes that transform data visually with data flows or by using compute services such as Azure HDInsight Hadoop, Azure Databricks, and Azure SQL Database.
https://docs.microsoft.com/en-gb/azure/data-factory/introduction

NEW QUESTION 121
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.)



Answer:



Explanation:
Box 1: Install a self-hosted integration runtime. The Integration Runtime is a customer-managed data integration infrastructure used by Azure Data Factory to provide data integration capabilities across different network environments.
Box 2: Create a pipeline. With ADF, existing data processing services can be composed into data pipelines that are highly available and managed in the cloud. These data pipelines can be scheduled to ingest, prepare, transform, analyze, and publish data, and ADF manages and orchestrates the complex data and processing dependencies.
https://docs.microsoft.com/en-us/azure/machine-learning/team-data-science-process/move-sql-azure-adf
https://docs.microsoft.com/pl-pl/azure/data-factory/tutorial-hybrid-copy-data-tool
https://docs.microsoft.com/en-us/azure/data-factory/create-self-hosted-integration-runtime?tabs=data-factory
https://docs.microsoft.com/en-us/azure/data-factory/introduction

NEW QUESTION 122
HotSpot
You need to recommend an Azure Storage Account configuration for two applications named Application1 and Applications. The configuration must meet the following requirements:
- Storage for Application1 must provide the highest possible transaction rates and the lowest possible latency.
- Storage for Application2 must provide the lowest possible storage costs per GB.
- Storage for both applications must be optimized for uploads and downloads.
- Storage for both applications must be available in an event of datacenter failure.

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

Answer Area

Application1:

BlobStorage with Standard performance, Hot access tier, and Read-access geo-redundant storage (RA-GRS) replication
BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication
General purpose v1 with Premium performance and Locally-redundant storage (LRS) replication
General purpose v2 with Standard performance, Hot access tier, and Locally-redundant storage (LRS) replication

Application2:

BlobStorage with Standard performance, Cool access tier, and Geo-redundant storage (GRS) replication
BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication
General purpose v1 with Standard performance and Read-access geo-redundant storage (RA-GRS) replication
General purpose v2 with Standard performance, Cool access tier, and Read-access geo-redundant storage (RA-GRS) replication

Answer:

Answer Area

Application1:

BlobStorage with Standard performance, Hot access tier, and Read-access geo-redundant storage (RA-GRS) replication
BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication
General purpose v1 with Premium performance and Locally-redundant storage (LRS) replication
General purpose v2 with Standard performance, Hot access tier, and Locally-redundant storage (LRS) replication

Application2:

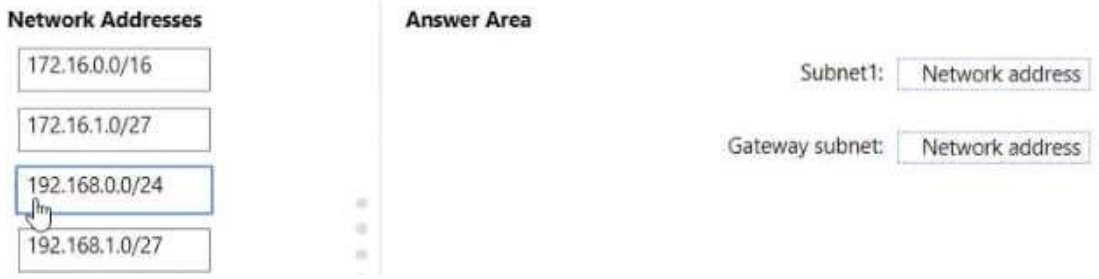
BlobStorage with Standard performance, Cool access tier, and Geo-redundant storage (GRS) replication
BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication
General purpose v1 with Standard performance and Read-access geo-redundant storage (RA-GRS) replication
General purpose v2 with Standard performance, Cool access tier, and Read-access geo-redundant storage (RA-GRS) replication

Explanation:
Box 1: BloblBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication.
BlockBlobStorage accounts: Storage accounts with premium performance characteristics for block blobs and append blobs. Recommended for scenarios with high transactions rates, or scenarios that use smaller objects or require consistently low storage latency. Premium: optimized for high transaction rates and single-digit consistent storage latency.
Box 2: General purpose v2 with Standard performance. General-purpose v2 accounts: Basic storage account type for blobs, files, queues, and tables. Recommended for most scenarios using Azure Storage.
https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview
https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

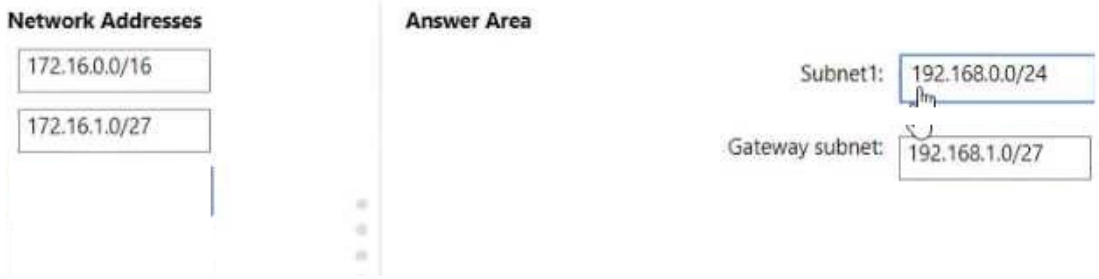
NEW QUESTION 123
Drag and Drop

You have an on-premises network that uses an IP address space of 172.16.0.0/16. You plan to deploy 25 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.

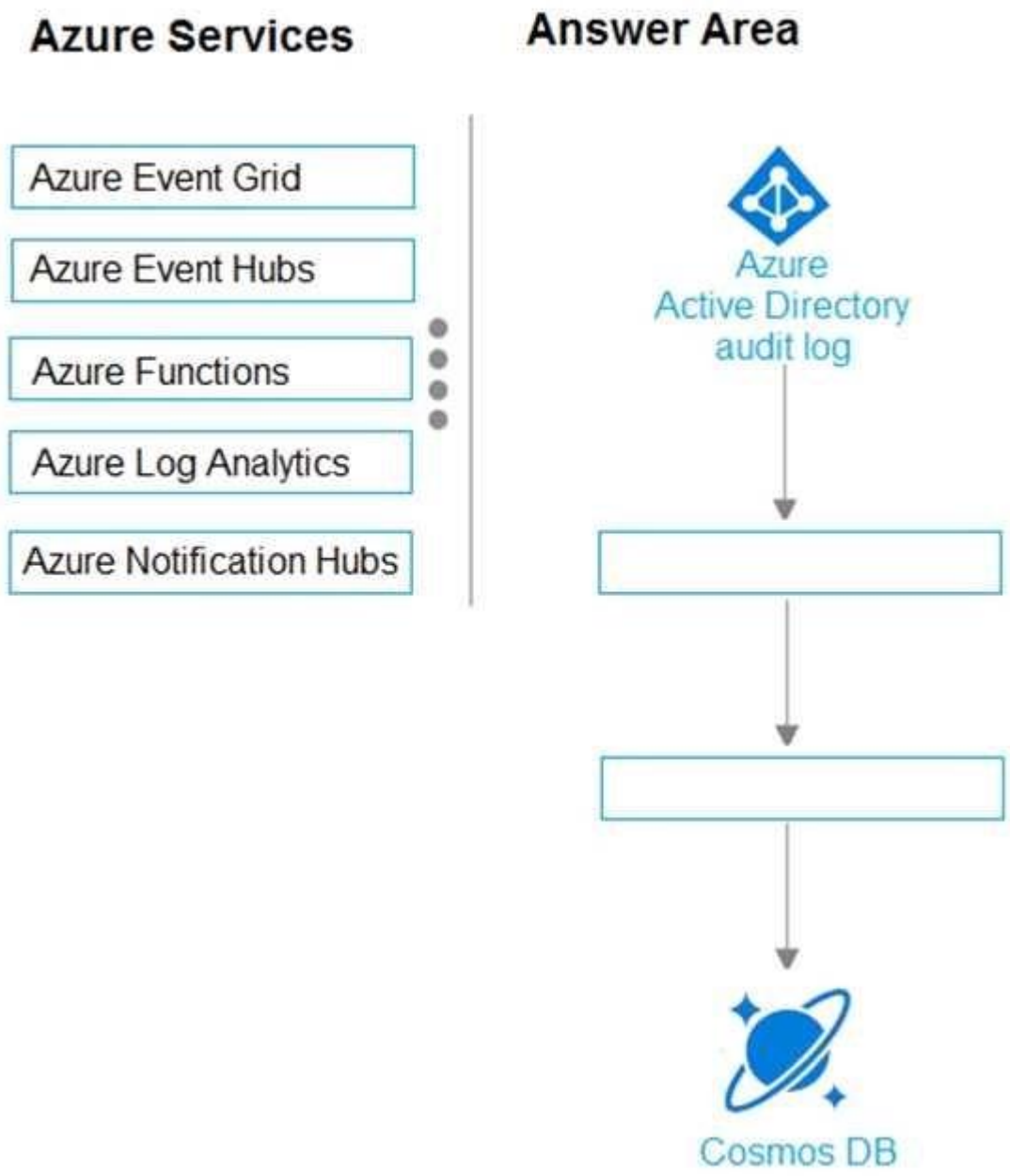
You need to recommend a subnet design that meets the technical requirements. What should you include in the recommendation? (To answer, drag the appropriate network addresses to the correct subnets. Each network address may be used once, more than once, or not at all. You may need to drag the split bar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



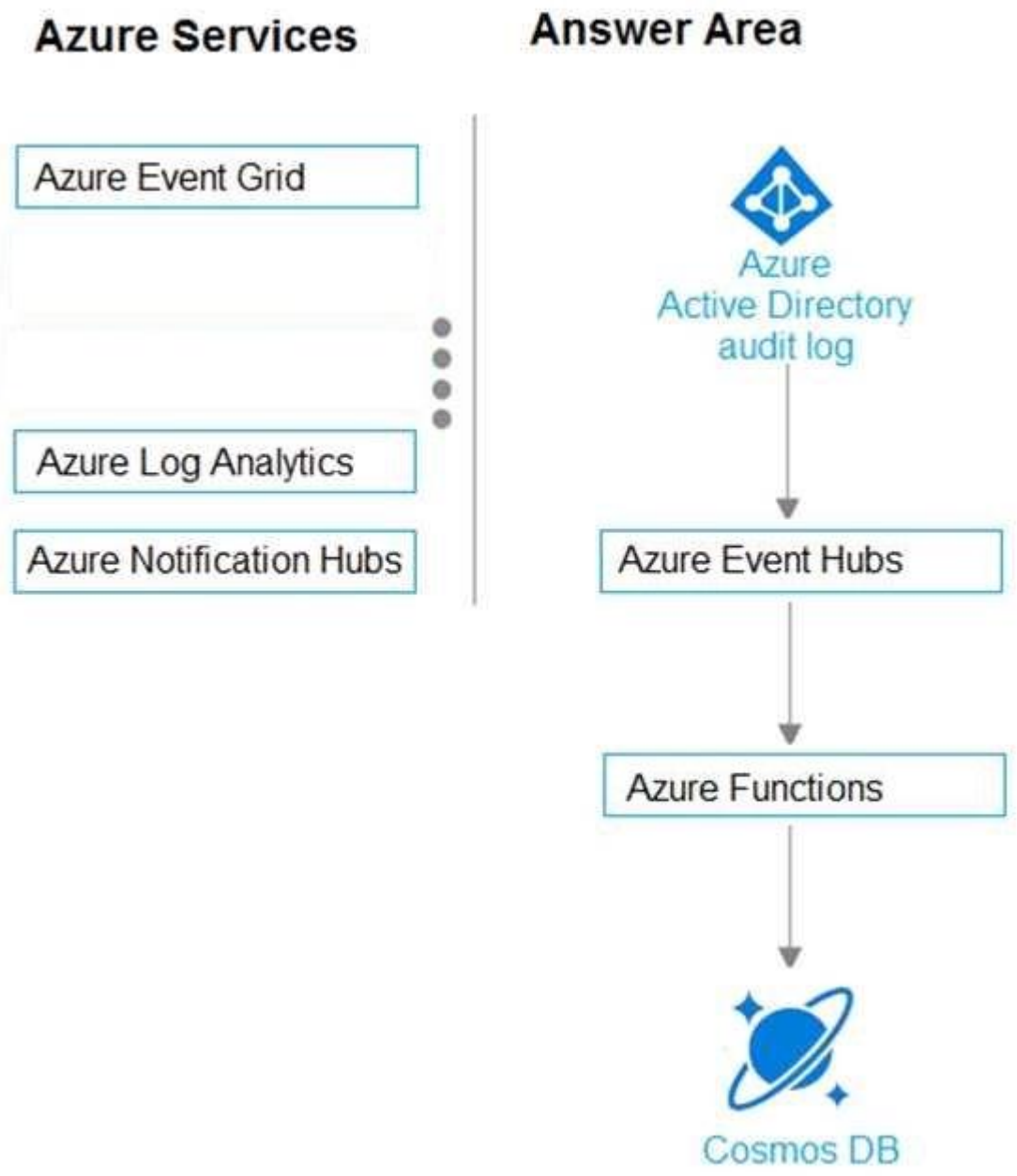
Answer:



NEW QUESTION 124
Drag and Drop
You need to design an architecture to capture the creation of users and the assignment of roles. The captured data must be stored in Azure Cosmos DB. Which Azure services should you include in the design? (To answer, drag the appropriate services to the correct targets. Each service 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.)


Azure Services
Answer Area
Azure Event Grid
Azure Event Hubs
Azure Functions
Azure Log Analytics
Azure Notification Hubs
Azure
Active Directory
audit log
Cosmos DB

Answer:



NEW QUESTION 125
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