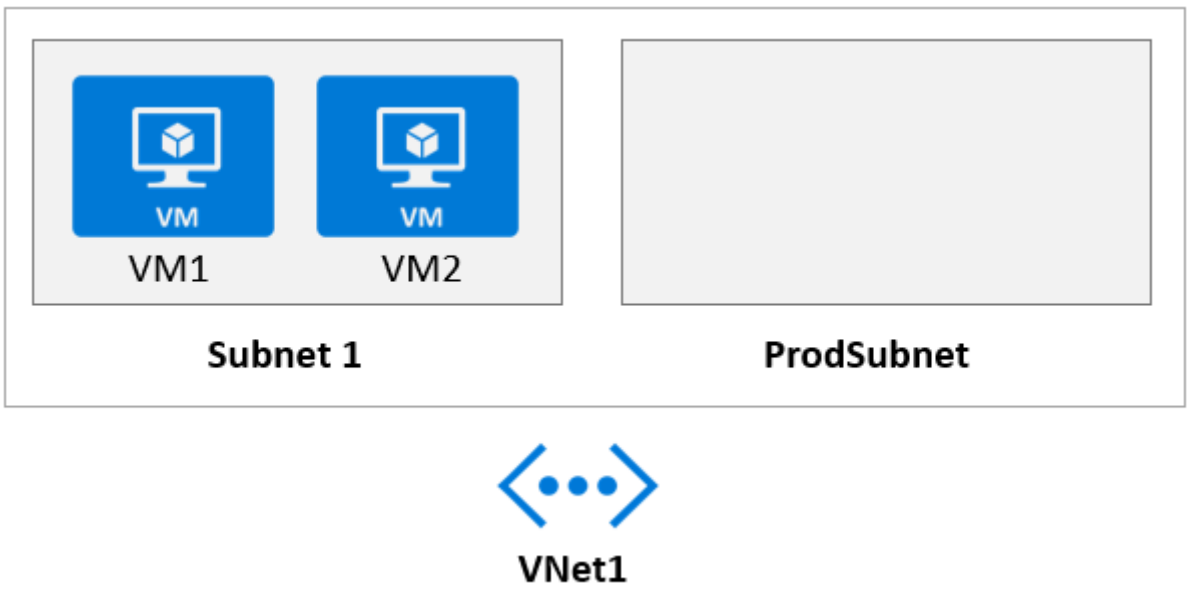
Question #7 *Topic 4*

HOTSPOT -

Your company develops a web service that is deployed to an Azure virtual machine named VM1. The web service allows an API to access real-time data from

VM1.

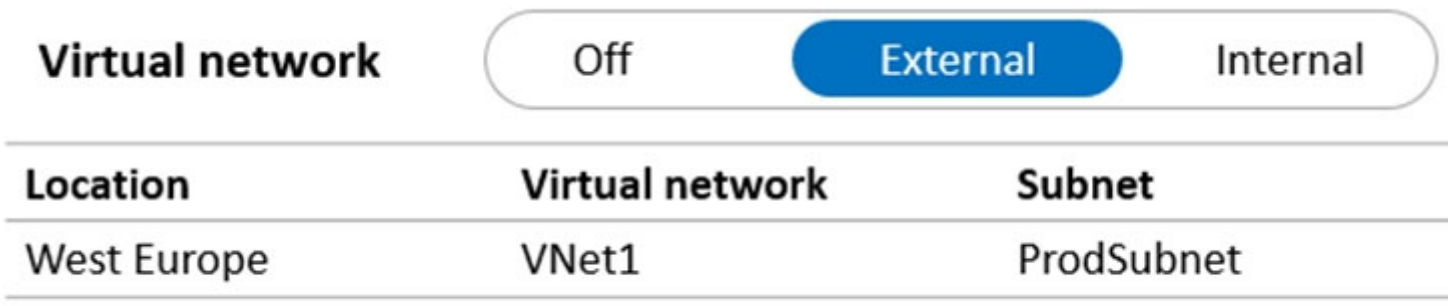
The current virtual machine deployment is shown in the Deployment exhibit.



The chief technology officer (CTO) sends you the following email message: "Our developers have deployed the web service to a virtual machine named VM1.

Testing has shown that the API is accessible from VM1 and VM2. Our partners must be able to connect to the API over the Internet. Partners will use this data in applications that they develop."

You deploy an Azure API Management (APIM) service. The relevant API Management configuration is shown in the API exhibit.



For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
The API is available to partners over the internet.	○	○
The APIM instance can access real-time data from VM1.	○	○
A VPN gateway is required for partner access.	○	○

Answer Area

Statements	Yes	No
The API is available to partners over the internet.	◯	◯
The APIM instance can access real-time data from VM1.	◯	◯
A VPN gateway is required for partner access.	◯	◯

Correct Answer:

Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-using-with-vnet

Question #8 *Topic 4*

DRAG DROP -

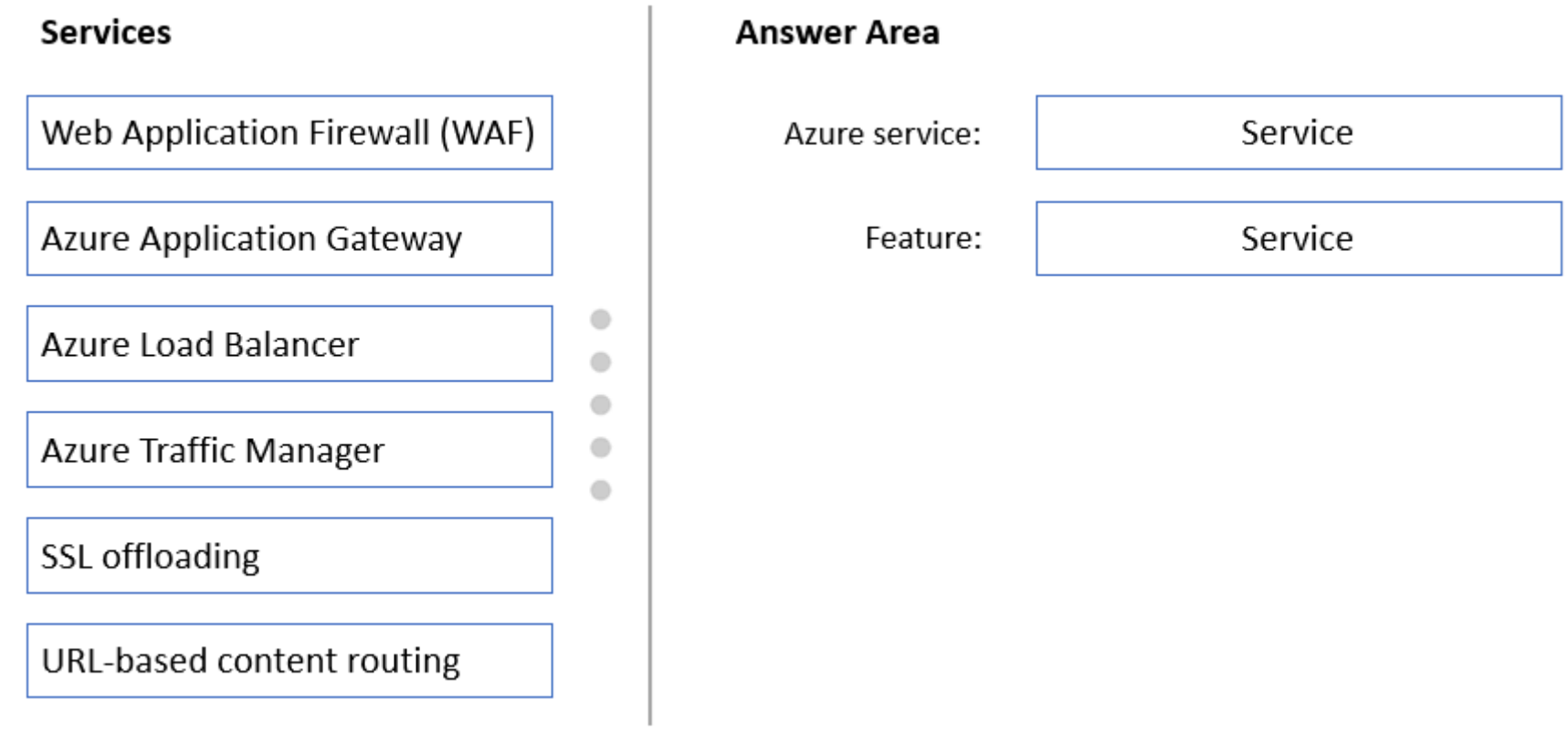
Your company has an existing web app that runs on Azure virtual machines.

You need to ensure that the app is protected from SQL injection attempts and uses a layer-7 load balancer. The solution must minimize disruptions to the code of the app.

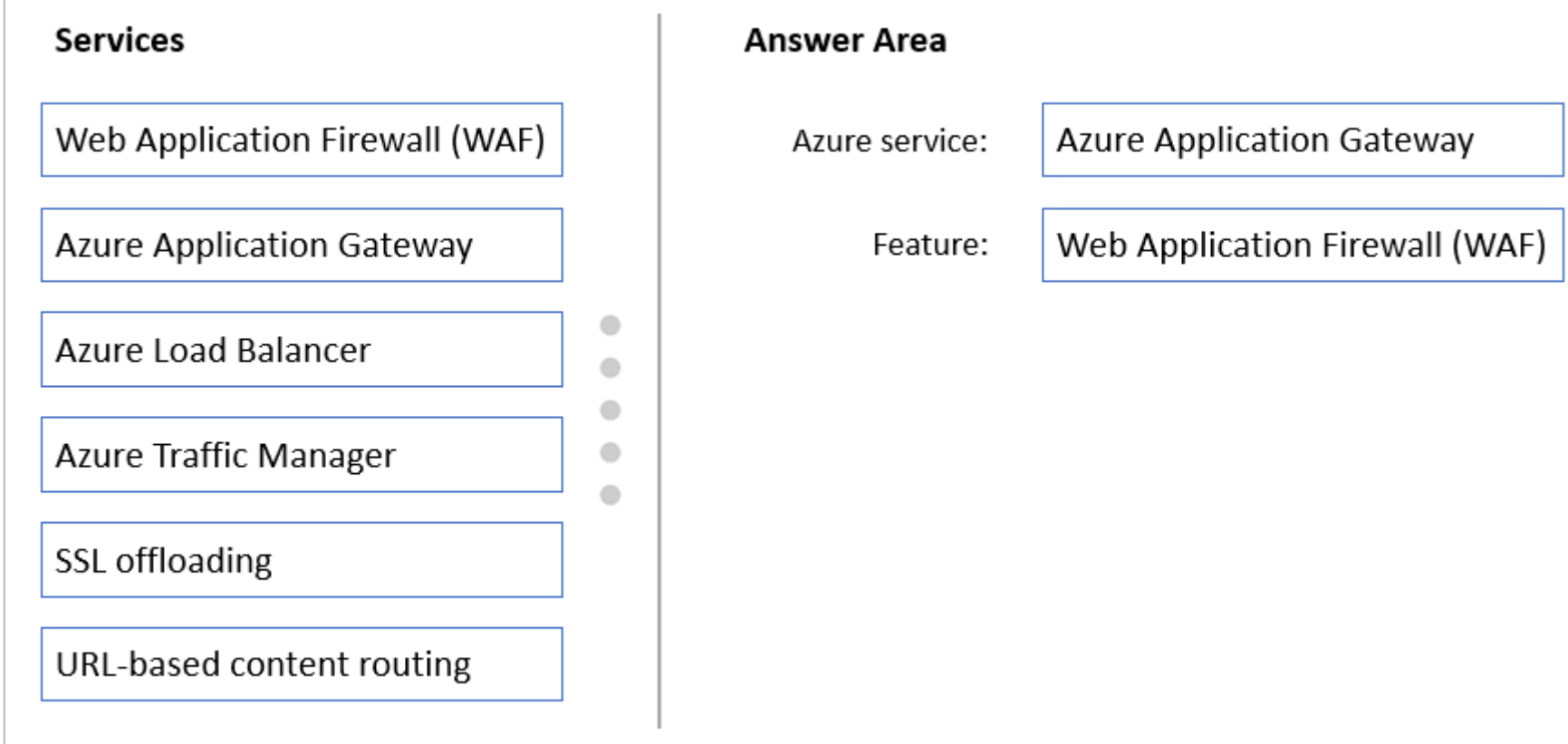
What should you recommend? To answer, drag the appropriate services to the correct targets. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:



Correct Answer:



Box 1: Azure Application Gateway

The Azure Application Gateway Web Application Firewall (WAF) provides protection for web applications. These protections are provided by the Open Web

Application Security Project (OWASP) Core Rule Set (CRS).

Box 2: Web Application Firewall (WAF)

Reference:

https://docs.microsoft.com/en-us/azure/web-application-firewall/ag/application-gateway-customize-waf-rules-portal

Question #9 *Topic 4*

You are designing a microservices architecture that will be hosted in an Azure Kubernetes Service (AKS) cluster. Apps that will consume the microservices will be hosted on Azure virtual machines. The virtual machines and the AKS cluster will reside on the same virtual network.
You need to design a solution to expose the microservices to the consumer apps. The solution must meet the following requirements:
☞ Ingress access to the microservices must be restricted to a single private IP address and protected by using mutual TLS authentication.
☞ The number of incoming microservice calls must be rate-limited.
☞ Costs must be minimized.
What should you include in the solution?

A. Azure App Gateway with Azure Web Application Firewall (WAF)

B. Azure API Management Standard tier with a service endpoint

C. Azure Front Door with Azure Web Application Firewall (WAF)

D. Azure API Management Premium tier with virtual network connection

Correct Answer: *D*
One option is to deploy APIM (API Management) inside the cluster VNet.
The AKS cluster and the applications that consume the microservices might reside within the same VNet, hence there is no reason to expose the cluster publicly as all API traffic will remain within the VNet. For these scenarios, you can deploy API Management into the cluster VNet. API Management Premium tier supports
VNet deployment.
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-kubernetes

Community vote distribution

D (93%) 7%

Question #10 *Topic 4*

You have a .NET web service named Service1 that performs the following tasks:
☞ Reads and writes temporary files to the local file system.
☞ Writes to the Application event log.
You need to recommend a solution to host Service1 in Azure. The solution must meet the following requirements:
☞ Minimize maintenance overhead.
☞ Minimize costs.
What should you include in the recommendation?

A. an Azure App Service web app

B. an Azure virtual machine scale set

C. an App Service Environment (ASE)

D. an Azure Functions app

Correct Answer: *A*
Azure Web App meets the requirements and is less expansive compared to VM scale sets.
Reference:
https://docs.microsoft.com/es-es/azure/app-service/troubleshoot-diagnostic-logs

Community vote distribution

A (88%) 12%

Question #11 *Topic 4*

You have the Azure resources shown in the following table.

Name	Type	Location
US-Central-Firewall-policy	Azure Firewall policy	Central US
US-East-Firewall-policy	Azure Firewall policy	East US
EU-Firewall-policy	Azure Firewall policy	West Europe
USEastfirewall	Azure Firewall	Central US
USWestfirewall	Azure Firewall	East US
EUFirewall	Azure Firewall	West Europe

You need to deploy a new Azure Firewall policy that will contain mandatory rules for all Azure Firewall deployments. The new policy will be configured as a parent policy for the existing policies.

What is the minimum number of additional Azure Firewall policies you should create?

A. 0

B. 1

C. 2

D. 3

Correct Answer: *D*

Firewall policies work across regions and subscriptions.

Place all your global configurations in the parent policy.

The parent policy is required to be in the same region as the child policy.

Each of the three regions must have a new parent policy.

Reference:

https://docs.microsoft.com/en-us/azure/firewall-manager/overview

Community vote distribution

D (79%) B (21%)

Question #12 *Topic 4*

Your company has an app named App1 that uses data from the on-premises Microsoft SQL Server databases shown in the following table.

NAME	SIZE
DB1	400 GB
DB2	250 GB
DB3	300 GB
DB4	50 GB

App1 and the data are used on the first day of the month only. The data is not expected to grow more than 3 percent each year.
The company is rewriting App1 as an Azure web app and plans to migrate all the data to Azure.
You need to migrate the data to Azure SQL Database and ensure that the database is only available on the first day of each month.
Which service tier should you use?

A. vCore-based General Purpose

B. DTU-based Standard

C. vCore-based Business Critical

D. DTU-based Basic

Correct Answer: *A*
Note: App1 and the data are used on the first day of the month only. See Serverless compute tier below.
The vCore based purchasing model.
The term vCore refers to the Virtual Core. In this purchasing model of Azure SQL Database, you can choose from the provisioned compute tier and serverless compute tier.
* Provisioned compute tier: You choose the exact compute resources for the workload.
* Serverless compute tier: Azure automatically pauses and resumes the database based on workload activity in the serverless tier. During the pause period, Azure does not charge you for the compute resources.
Reference:
https://www.sqlshack.com/dtu-and-vcore-based-models-for-azure-sql-databases/

Community vote distribution

A (91%) 9%

Question #13 *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 Service Fabric

B. Azure Data Lake

C. Azure Service Bus

D. Azure Traffic Manager

Correct Answer: *C*
Asynchronous messaging options in Azure include Azure Service Bus, Event Grid, and Event Hubs.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging

Community vote distribution

C (100%)

Question #14 *Topic 4*

Your company has 300 virtual machines hosted in a VMware environment. The virtual machines vary in size and have various utilization levels.
You plan to move all the virtual machines to Azure.
You need to recommend how many and what size Azure virtual machines will be required to move the current workloads to Azure. The solution must minimize administrative effort.
What should you use to make the recommendation?

A. Azure Pricing calculator

B. Azure Advisor

C. Azure Migrate

D. Azure Cost Management

Correct Answer: *C*
Azure Migrate provides a centralized hub to assess and migrate on-premises servers, infrastructure, applications, and data to Azure. It provides the following:
Unified migration platform: A single portal to start, run, and track your migration to Azure. Range of tools: A range of tools for assessment and migration.
Reference:
https://docs.microsoft.com/en-us/azure/migrate/migrate-services-overview

Community vote distribution

C (100%)

Question #15 *Topic 4*

You plan to provision a High Performance Computing (HPC) cluster in Azure that will use a third-party scheduler.
You need to recommend a solution to provision and manage the HPC cluster node.
What should you include in the recommendation?

A. Azure Automation

B. Azure CycleCloud

C. Azure Purview

D. Azure Lighthouse

Correct Answer: *B*
You can dynamically provision Azure HPC clusters with Azure CycleCloud.
Azure CycleCloud is the simplest way to manage HPC workloads.
Note: Azure CycleCloud is an enterprise-friendly tool for orchestrating and managing High Performance Computing (HPC) environments on Azure. With
CycleCloud, users can provision infrastructure for HPC systems, deploy familiar HPC schedulers, and automatically scale the infrastructure to run jobs efficiently at any scale. Through CycleCloud, users can create different types of file systems and mount them to the compute cluster nodes to support HPC workloads.
Reference:
https://docs.microsoft.com/en-us/azure/cyclecloud/overview

Community vote distribution

B (100%)

HOTSPOT -

You are designing an Azure App Service web app.

You plan to deploy the web app to the North Europe Azure region and the West Europe Azure region.

You need to recommend a solution for the web app. The solution must meet the following requirements:

- Users must always access the web app from the North Europe region, unless the region fails.
- The web app must be available to users if an Azure region is unavailable.
- Deployment costs must be minimized.

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

Request routing method:

- A Traffic Manager profile
- Azure Application Gateway
- Azure Load Balancer

Request routing configuration:

- Cookie-based session affinity
- Performance traffic routing
- Priority traffic routing
- Weighted traffic routing

Answer Area

Request routing method:

- A Traffic Manager profile
- Azure Application Gateway
- Azure Load Balancer

Correct Answer:

Request routing configuration:

- Cookie-based session affinity
- Performance traffic routing
- Priority traffic routing
- Weighted traffic routing

Box 1: A Traffic Manager profile

To support load balancing across the regions we need a Traffic Manager.

Box 2: Priority traffic routing -

Priority traffic-routing method.

Often an organization wants to provide reliability for their services. To do so, they deploy one or more backup services in case their primary goes down. The

'Priority' traffic-routing method allows Azure customers to easily implement this failover pattern.

Reference:

https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/app-service-web-app/multi-region

https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods

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

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%)