**Learning Path 1: Cloud Concepts**

1. A client wants to deploy their web application and associated data to the cloud with minimal configuration.

Which cloud service type is suitable for this and why?

Answer:

2. What important cloud attribute allows businesses and organizations to quickly grow their virtual machine infrastructure as their workloads increase, and how is it achieved?

Answer:

3. What are the main differences between public and private clouds?

Answer:

4. A developer wants to deploy their application code to the cloud and needs access to the operating system to install custom software. Which is the best cloud service type to use in this case and why?

Answer:

5. What are the main differences between OpEx and CapEx? Give an example of each.

Answer:

**Learning Path 2: Azure Architecture and Services**

1. What can a company do to help ensure data redundancy when using Azure Blob storage?

Answer:

2. Describe what a resource group is on Azure and give an example of best practice when using a resource group.

Answer:

3. Describe what an availability zone is on Azure and what availability zones are used for.

Answer:

4. What is the main benefit to a developer when using Azure Functions?

Answer:

5. In the context of the network layer in defense-in-depth, name and describe two actions that will help secure cloud resources.

Answer:

6. In what scenario would the Azure Blob immutable storage feature be useful?

Answer:

**Learning Path 3: Management and Governance**

1. A company wants to implement geographic compliance requirements to limit locations where services can be

deployed. How might this be done?

Enter your answer in the following space.

Answer:

2. An employee working in the human resources department of a company is assigned a role via the Azure rolebased access control (RBAC). This enables them to read and write to employee records. Considering the company has many other departments, should employees in all departments have the same RBAC role assigned as the human resource employees, or can it be done another way?

Answer:

3. A business wants to enhance the security of the customer sign-in process for its website so that it asks for additional forms of identification. What type of Azure service could they use for this? Additionally, give examples of the types of additional identification information that could be used.

Enter your answer in the following space.

Answer:

4. A business offers several separate services for music, video, and eBook content with each service requiring separate sign-in credentials. To make the customer experience more seamless they want to use a service that allows customers to use one set of sign-in credentials for all separate services. Currently the business uses Azure Active Directory (AAD). What service do they need to add to enable the new sign-in approach?

Answer:

5. What are some strategies a company could use to minimize their costs when using Virtual Machines?

Answer:

6. Using the Azure Pricing Calculator, price a virtual machine in different locations around the world and compare the costs. What do you notice? What factors may have influenced the prices that you see? And what factors other than cost should you consider when choosing a location for your virtual machine?

Answer: