

# Knowledge check

3 minutes

Tailwind Traders has several active development projects. As the solution Architect for the company, you're responsible for selecting the right compute technology for each project. Ideally, you'd like to create compute resources and configure them to do the work that's needed, and pay only for the services used.

Here are the specific project requirements:

- **Real-time inventory tracking.** Each evening, product availability is updated on the company website. The management team wants the stock inventory updated as soon as products are ordered. To fulfill this requirement, the product database needs to be updated, and stock reorder notifications need to be sent, as needed. The current program is a Windows service written in C#.
- **Migrate datacenter virtual machines.** The datacenter virtual machines host relational database servers. These machines are used for online orders. The company has requested a solution to move this capability to the cloud.
- **Host data processing application in the cloud.** The company has a small data processing application. The app ingests new product photos and writes the content to Azure Blob Storage. The app takes only a few seconds to run. The sales team has requested a solution that hosts the app in the cloud and reduces costs.

## Answer the following questions

Choose the best response for each of the questions below. Then select **Check your answers**.

1. Which compute option best supports the real-time inventory tracking requirement? \*

☐ Azure Logic Apps

☒ Azure Functions

✓ Correct. The Tailwind Traders development team has already written the logic in C#. It makes sense to copy the relevant C# code from the Windows service and port it to an Azure function. The developers can bind the function to trigger each time a new message appears on a specific queue.

☐ Azure Virtual Machines

2. What type of virtual machine is best for the datacenter migration requirement? \*

☐ General purpose VM

☐ Compute-optimized VM

☒ Memory-optimized VM

✓ Correct. Memory-optimized VMs are designed to have a high memory-to-CPU ratio. Memory-optimized VMs are great for relational database servers, medium to large caches, and in-memory analytics.

3. What compute solution is best for hosting the company's data processing application? \*

☒ Azure Container Instances

✓ Correct. Azure Container Instances is an ideal compute solution for containers. The company can achieve significant cost savings by using per-second billing.

☐ Azure Virtual Machines

☐ Web Apps (supported by Azure App Service)

## Next unit: Summary and resources

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