✓ **Congratulations! You passed!**

Grade received 100%   **To pass** 80% or higher

[**Go to next item**]

---

1. Which of the following will an application spend the longest time retrieving data from?

   1 / 1 point

○ CPU L2 cache

○ RAM

○ Disk

◉ The network

> ✓ **Correct**
> Right on! An application will take the longest time trying to retrieve data from the network.

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2. Which tool can you use to verify reports of 'slowness' for web pages served by a web server you manage?

   1 / 1 point

○ The top tool

◉ The ab tool

○ The nice tool

○ The pidof tool

> ✓ **Correct**
> Great work! The ab tool is an Apache Benchmark tool used to figure out how slow a web server is based on average timing of requests.

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3. If our computer running Microsoft Windows is running slow, what performance monitoring tools can we use to analyze our system resource usage to identify the bottleneck? (Check all that apply)

   1 / 1 point

☑ Performance Monitor

> ✓ **Correct**
> Excellent! Performance Monitor is a system monitoring program that provides basic CPU and memory resource measurements in Windows.

☑ Resource Monitor

> ✓ **Correct**
> Nice job! Resource Monitor is an advanced resource monitoring utility that provides data on hardware and software resources in real time.

☐ Activity Monitor

☐ top

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4. Which of the following programs is likely to run faster and more efficiently, with the least slowdown?

   1 / 1 point

○ A program with a cache stored on a hard drive

◉ A program small enough to fit in RAM

○ A program that reads files from an optical disc

○ A program that retrieves most of its data from the Internet

> ✓ **Correct**
> Nice work! Since RAM access is faster than accessing a disk or network, a program that can fit in RAM will run faster.

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5. What might cause a single application to slow down an entire system? (Check all that apply)

   1 / 1 point

☑ A memory leak

> ✓ **Correct**
> Woohoo! Memory leaks happen when an application doesn't release memory when it is supposed to.

☐ The application relies on a slow network connection

☑ Handling files that have grown too large

> ✓ **Correct**
> Awesome! If files generated by the application have grown overly large, slowdown will occur if the application needs to store a copy of the file in RAM in order to use it.

☐ Hardware faults