

OBJECTIVE

understand graphics 3.1

UNDERSTAND RENDERING ENGINES

SCENARIO: Kim has been transferred to the animation department at Adventure Works. Everyone on the entire team is required to know and use DirectX® in the production of the current project, Adventures in Space. DirectX is a powerful technology that is designed to make Microsoft Windows®-based computers an ideal platform for running and displaying applications rich in multimedia elements such as full-color graphics, video, 3-D animation, and rich audio.

1. Which of the following APIs in DirectX is used for creating 2-D graphics?
 - a. DirectDraw
 - b. Direct2D
 - c. DirectWrite
2. Which of the following APIs in DirectX is used for creating high-quality text rendering?
 - a. DirectText
 - b. DirectWrite
 - c. Direct3D
3. Which of the following APIs in DirectX is used for creating 3-D graphics?
 - a. Direct3D
 - b. DirectX3D
 - c. DirectX Graphics

HINT



An API is a set of rules and specifications that software programs can follow to communicate with each other.

Answers

1. Which of the following APIs in DirectX is used for creating 2-D graphics?
b. Direct2D. This has replaced DirectDraw, which was available in older versions.
2. Which of the following APIs in DirectX is used for creating high-quality text rendering?
b. DirectWrite
3. Which of the following APIs in DirectX is used for creating 3-D graphics?
a. Direct3D

Essential details

- **DirectX** is a collection of APIs from Microsoft® for handling tasks related to multimedia, especially programming games and high-performance multimedia applications, including 2-D and 3-D graphics.
- A **codec** is a device or software that is used to encode or decode (compress or decompress) a digital media file.
- An **application programming interface (API)** is a set of codes and rules used to communicate between two software programs.
- **Tearing** occurs when the VSync is disabled and the graphics card and monitor rates have different refresh rates. There appears to be a line separating two halves when this occurs.
- **VSync**, which stands for “vertical synchronization,” is used to synchronize the graphics card with the output on the monitor.

FAST TRACK HELP

- **Introduction to DirectX**
<http://channel9.msdn.com/coding4fun/articles/Beginning-Game-Development-Part-II-Introduction-to-DirectX>
- **DirectX Developer Center**
<http://msdn.microsoft.com/en-us/directx/default.aspx>
- **DirectX Samples**
[http://msdn.microsoft.com/en-us/library/dd368187\(v=VS.85\).aspx](http://msdn.microsoft.com/en-us/library/dd368187(v=VS.85).aspx)
- **QuickStart: A basic DirectX app**
[http://msdn.microsoft.com/en-us/library/br229585\(v=VS.85\).aspx](http://msdn.microsoft.com/en-us/library/br229585(v=VS.85).aspx)

 TRAINING	Track Your Score
	____ / 3