A monitor’s manual lists its range of acceptable synchronization values as 27kHz–96kHz  
horizontal and 50Hz–160Hz vertical. What implications does this have for the resolutions  
and refresh rates the monitor can handle?  
  
The monitor can handle up to 160Hz vertical refresh rate depending on the resolution.

The vertical refresh rate range includes a maximum value, but that value may be reduced when the resolution and vertical refresh rate would demand a higher horizontal refresh rate than the monitor can handle.

The resolution affects the maximum refresh rate.