

# [Free report on calculate vp vpp and frequency](https://assignbuster.com/free-report-on-calculate-vp-vpp-and-frequency/)

3. What is the volts/div setting and the time/div setting after using auto scale?   
Answer: Volt/div setting= 1V, time/div= 2 µs   
5. What is the new time/div setting?   
Answer= 1, 340µs

Answer: Vpp = 4. 71V Vp= 2. 25 V, Frequency= 1/T = 1/1340 = 0. 75 kHz   
7. t= 740 µs, Freq= 1/T =(1/740 µs) = 1. 6 kHz   
8. Vp= 4. 761V

## Calculations

Percentage diff for Vpp (V) = (Vpp2-Vpp1)/Vpp1 = (4. 76-4. 71)/4. 76 = (0. 05/4. 76) x 100 = 1. 05%   
Percentage diff for time (µs) = (t1-t2)/t2 = (1340 – 740)/740 = (600/1340) x 100 = 44. 78%   
Percentage diff for frequency (kHz) = (f2-f1)/f1 = (1. 6 – 0. 75)/1. 6 = 53%

## Questions and Answers

Why is there a percentage difference between the two methods of finding frequency and Vpp?   
Answer: This is as a result of the difference in the accuracy of the two methods. The cursors are more accurate than the visual estimates.

## What happens to the signal if you make the time/div very small? Very big?

Answer: when the value of the time/div is very small the measured waveform will appear too big and the signal will look like a continuous line. This is because at that point in time the beam sweeps very fast that its motion is invisible to the eye.   
Answer: when the value of the time/div is very big the waveform appears too smooth that the shape will not be seen.