Transient Simulations

PSpice Schematics 9.1
PSpice Simulation

• Transient Analysis
  – Output plot mimics the oscilloscope display
  – Do NOT use Vac as the sinusoidal voltage source.
    • This source should be used when running an AC Sweep simulation.
    • Vsin is the appropriate sinusoidal voltage source when running a transient analysis.
Setting Attributes for $V_{sin}$

For a simple sinusoid, set:

- $V_{OFF}$ (a d.c. offset voltage) to 0V,
- $V_{AMPL}$ (the amplitude of the sine wave) to the appropriate value,
- $FREQ$ (frequency in Hertz – this is not angular frequency) to the appropriate value.
Set the Final Time to a value that allows 3-5 cycles of the sinusoidal voltage to be shown.
To obtain a smoother sinusoid

In the Transient pop-up window, set a Step Ceiling that is a small fraction of the period of the sinusoid that you are plotting.

![Transient analysis setup](image)