

Electronics Sketching AC Signals

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Wilfrid Laurier University

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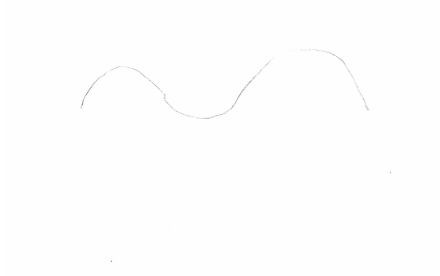
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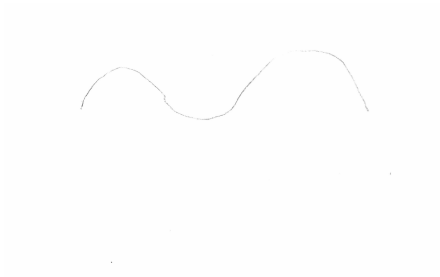
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(This will make it easy to show the amplitude.)
- 8 Mark the voltage at the midpoint of the waveform.
(This will make it easy to show the DC offset.)
- 9 Mark times at the vertical grid lines on the horizontal axis.

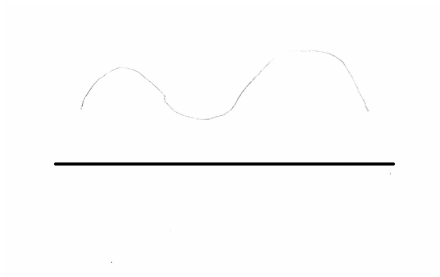
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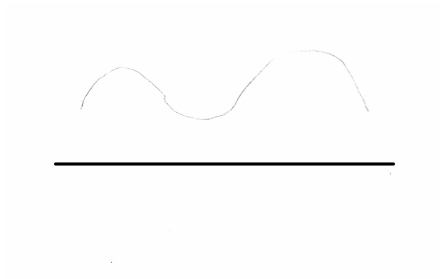
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- 5 Draw horizontal lines at the top and bottom of the waveform.
- 6 Draw a horizontal line at the midpoint of the waveform.
- 7 Mark voltages at the top and bottom of the waveform.
(This will make it easy to show the amplitude.)
- 8 Mark the voltage at the midpoint of the waveform.
(This will make it easy to show the DC offset.)
- 9 Mark times at the vertical grid lines on the horizontal axis.
(This will make it easy to show the period and frequency.)



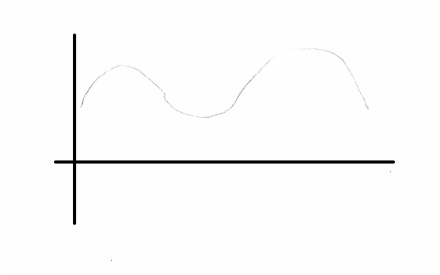


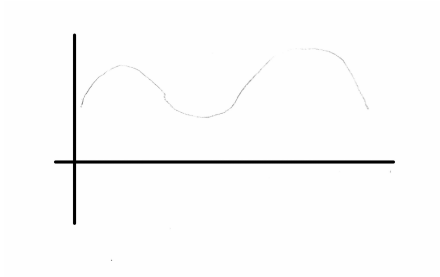
This is the shape of the wave.



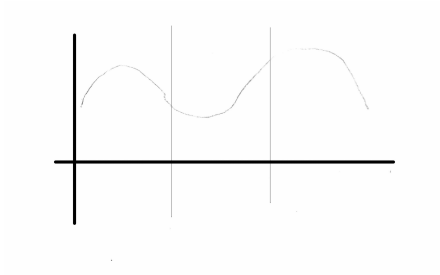


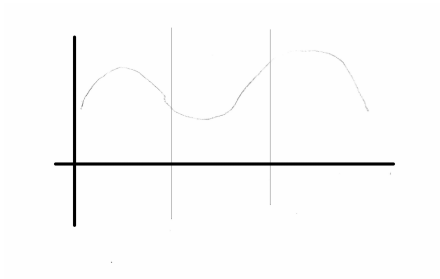
If, for example, it's always positive, then we'll draw the axis below it.



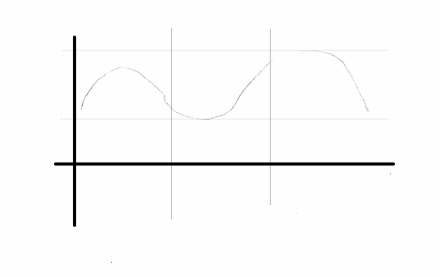


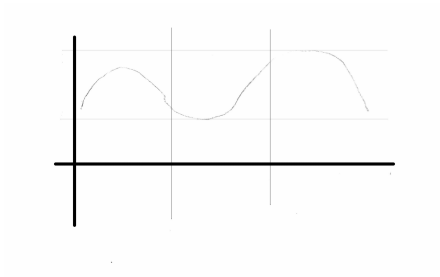
We can draw the vertical axis.



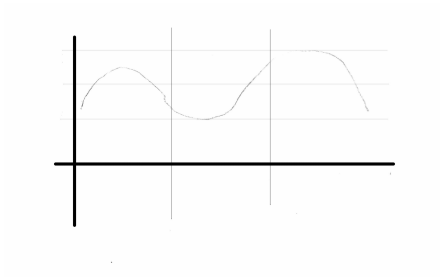


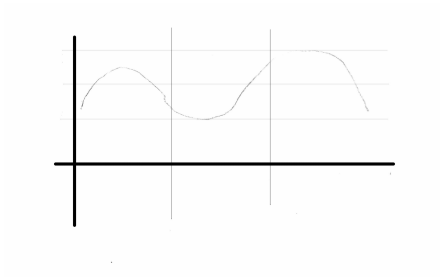
We can add some vertical grid lines where they belong.



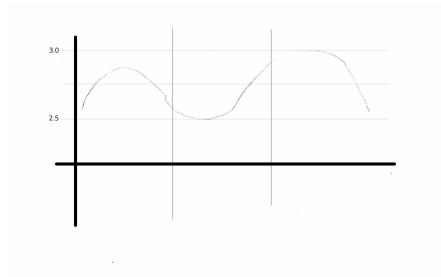


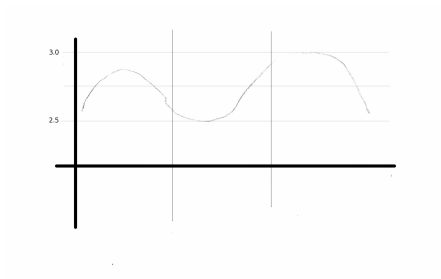
We can draw horizontal lines at the top and bottom of the wave so we can later add the voltage levels.



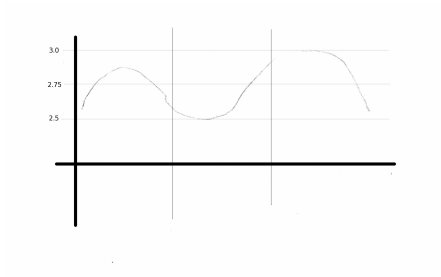


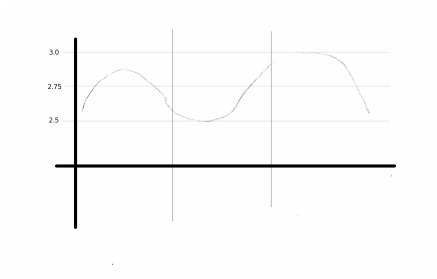
A horizontal line in the middle makes it easy to show the DC offset.



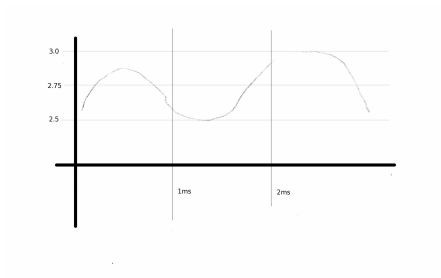


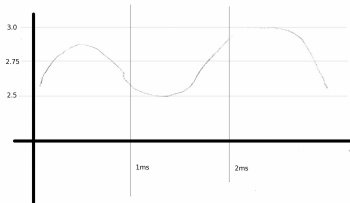
Now the top and bottom voltages can be added.





The DC offset can be shown explicitly, even if it's not on a grid line.





Adding the values for the horizontal gridlines makes the picture complete.