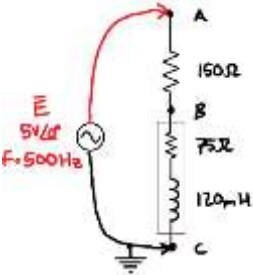
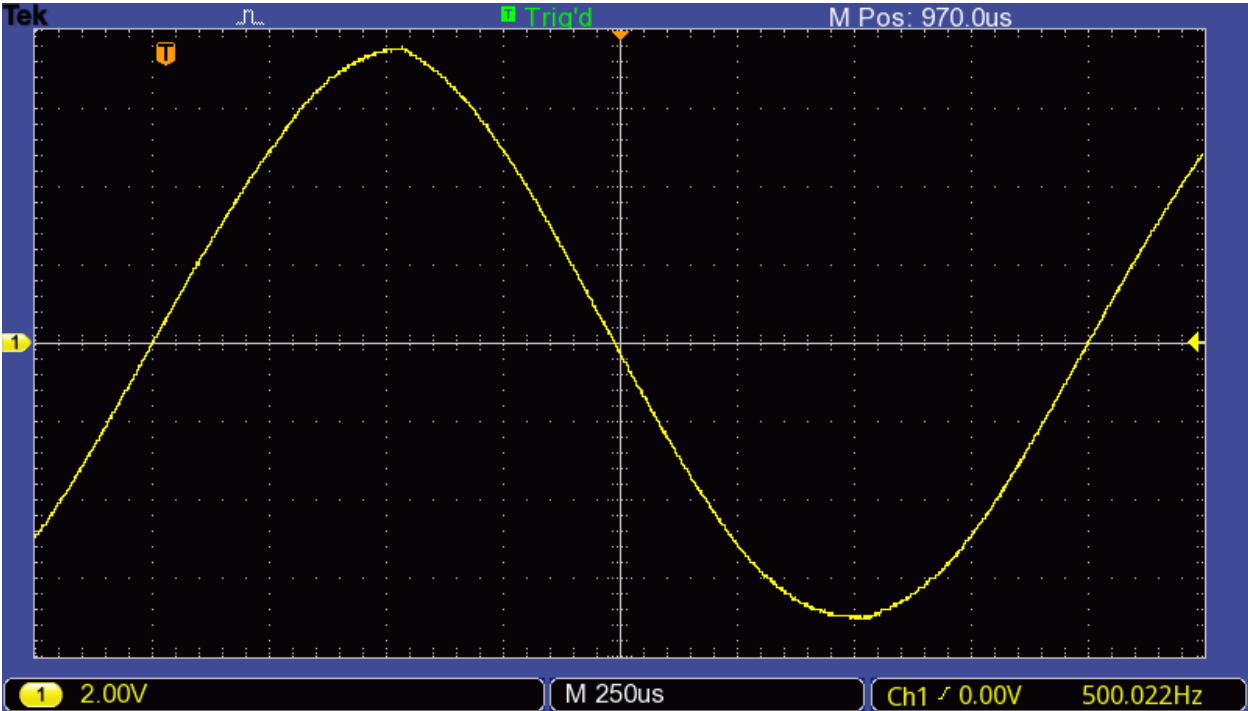


**Oscilloscope MATH Functions: Oscilloscopes in Series Circuits (28:01)**

Given this series AC circuit determine the voltage across each element, the current through each element, and the source current.

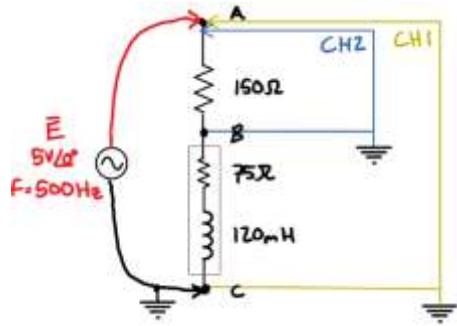


Interpret the oscilloscope display to verify source voltage properties on CH1 for the above circuit.

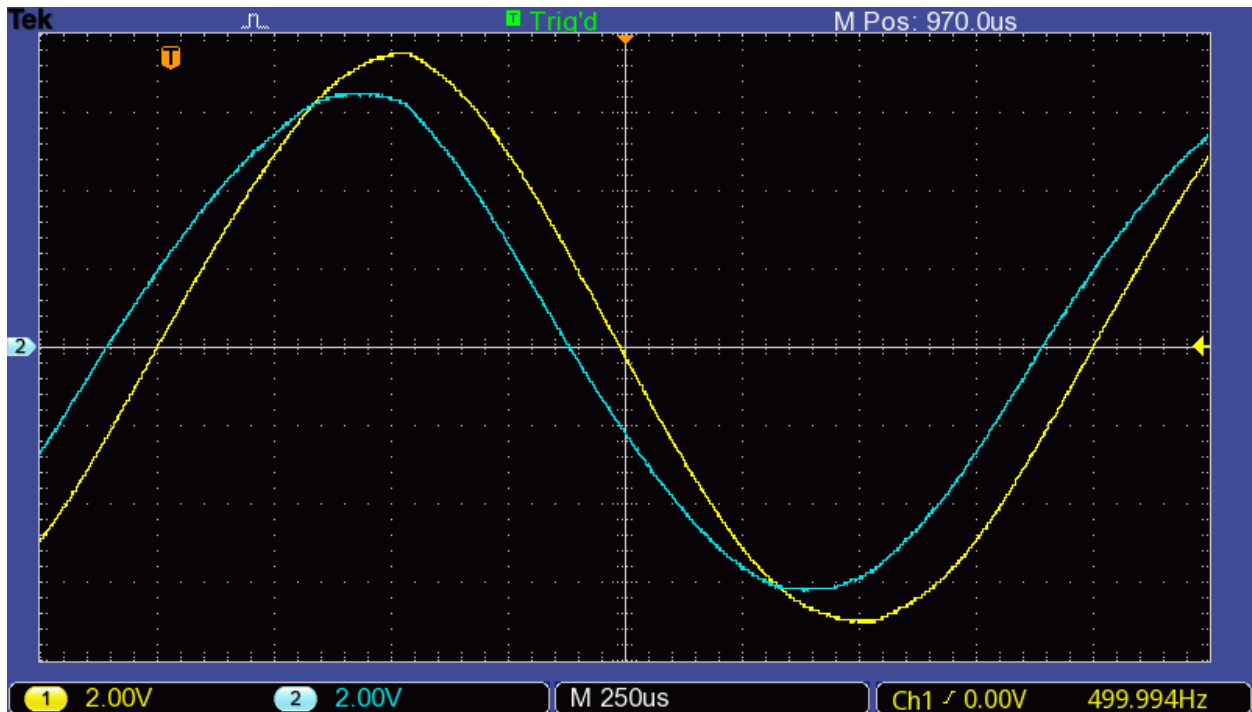


Identify the purpose of the alligator clip on an oscilloscope probe.

Identify the error in employing the CH2 probe in the following fashion. Draw the correct method of employing the CH2 probe.

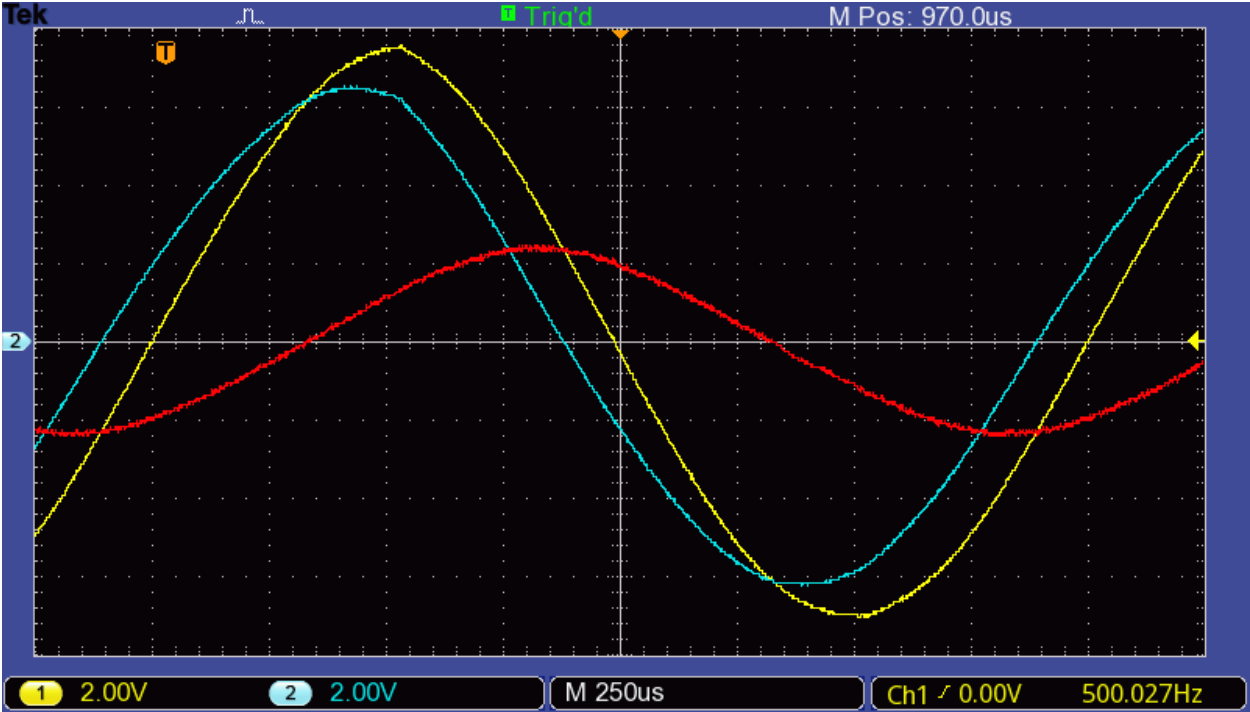


Interpret the oscilloscope display to verify the properties of voltage across the inductor on CH2 for the above circuit.



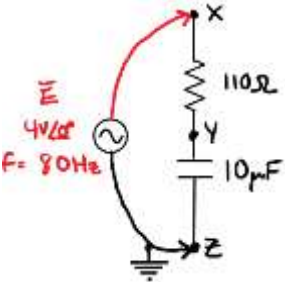
Identify how to access the MATH function on the Tektronix TBS1032B Digital Oscilloscope. Describe how the MATH function and Kirchhoff's Voltage Law is used to display voltage across the resistor. Identify which settings are important for the MATH function.

Interpret the oscilloscope display to verify the properties of voltage across the resistor (CH1-CH2) for the above circuit.

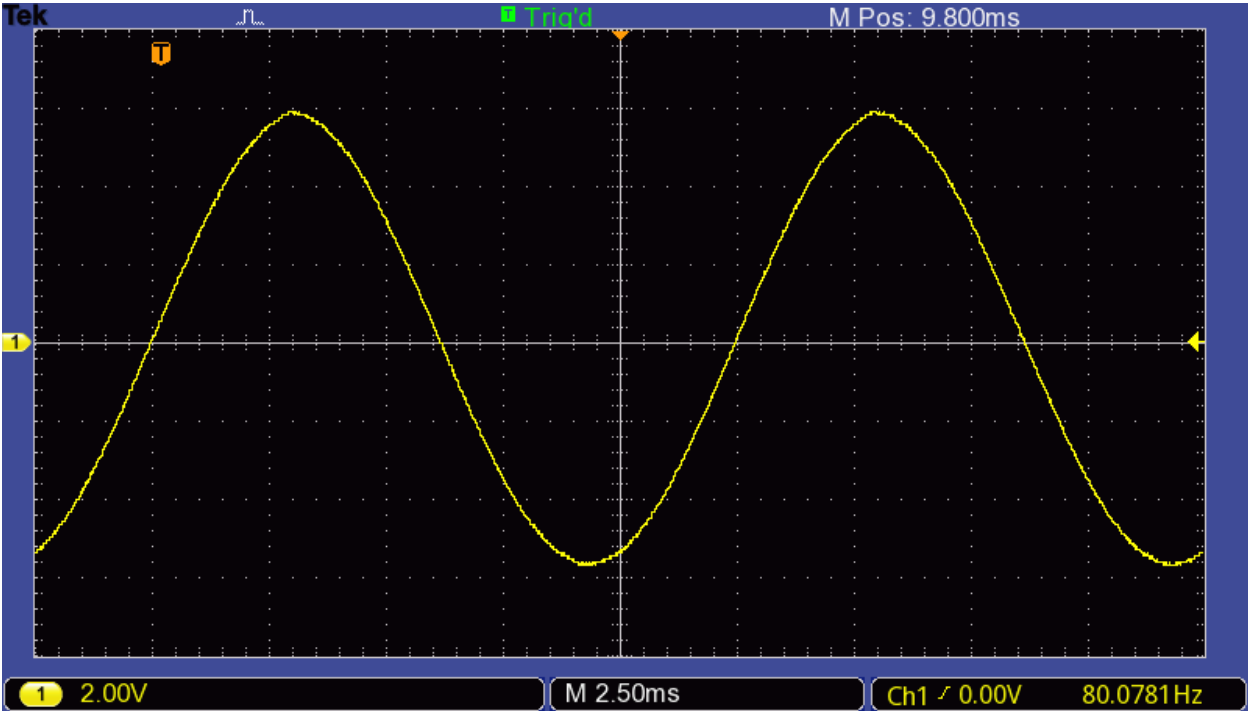


Identify the advantages of the MATH when employing an oscilloscope in a series AC circuit.

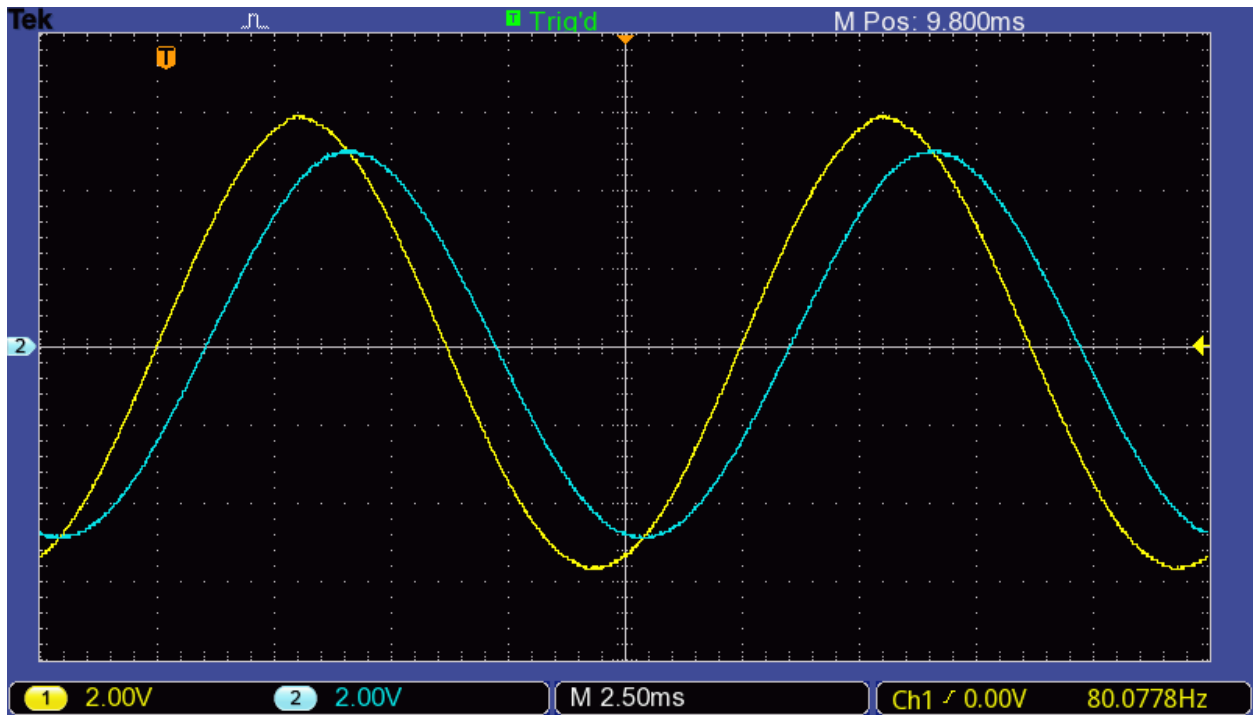
Given this series AC circuit determine the voltage across each element, the current through each element, and the source current.



Interpret the oscilloscope display to verify properties for source voltage on CH1 for the above circuit.



Interpret the oscilloscope display to verify the properties of voltage across the capacitor on CH2 for the above circuit.



Interpret the oscilloscope display to verify the properties of voltage across the resistor (CH1-CH2) for the above circuit.

