Caden Roberts

Lab Magnetic Induction

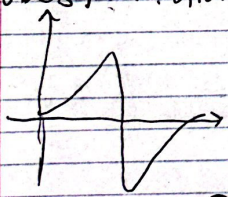
11/14 5N-01

Experiment 1

We are using an oscillope to investigate how magnetic flux affects the EMF. We observe an oscillation in the EMF when giving the magnet a slight tug. → (the oscillation moves up and down, oscillating in unison with the moving magnet)

Experiment 2

We are doing this experiment to observe how field orientation affects what we see on the oscillope. When quickly rotating the detector coil we observe a jump up in our reading on the oscillope. The pulse shape we observe when quickly moving the detector coil (parallel to the magnet axis) in followed by out of the magnets:



Experiment 3

We are doing this experiment to measure the direction of the magnetic field when the magnaprobe is the source. We observe oscillations decrease at 2.5/cycle/sec and amplitude gets smaller as coils move, oscillation increases when we put the detector at a right angle.

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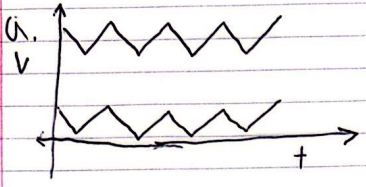
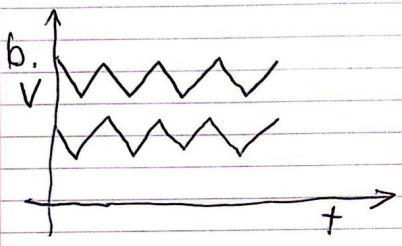
Pre Lab Magnetic Induction

5N-01 11/14

a.



b.



c.