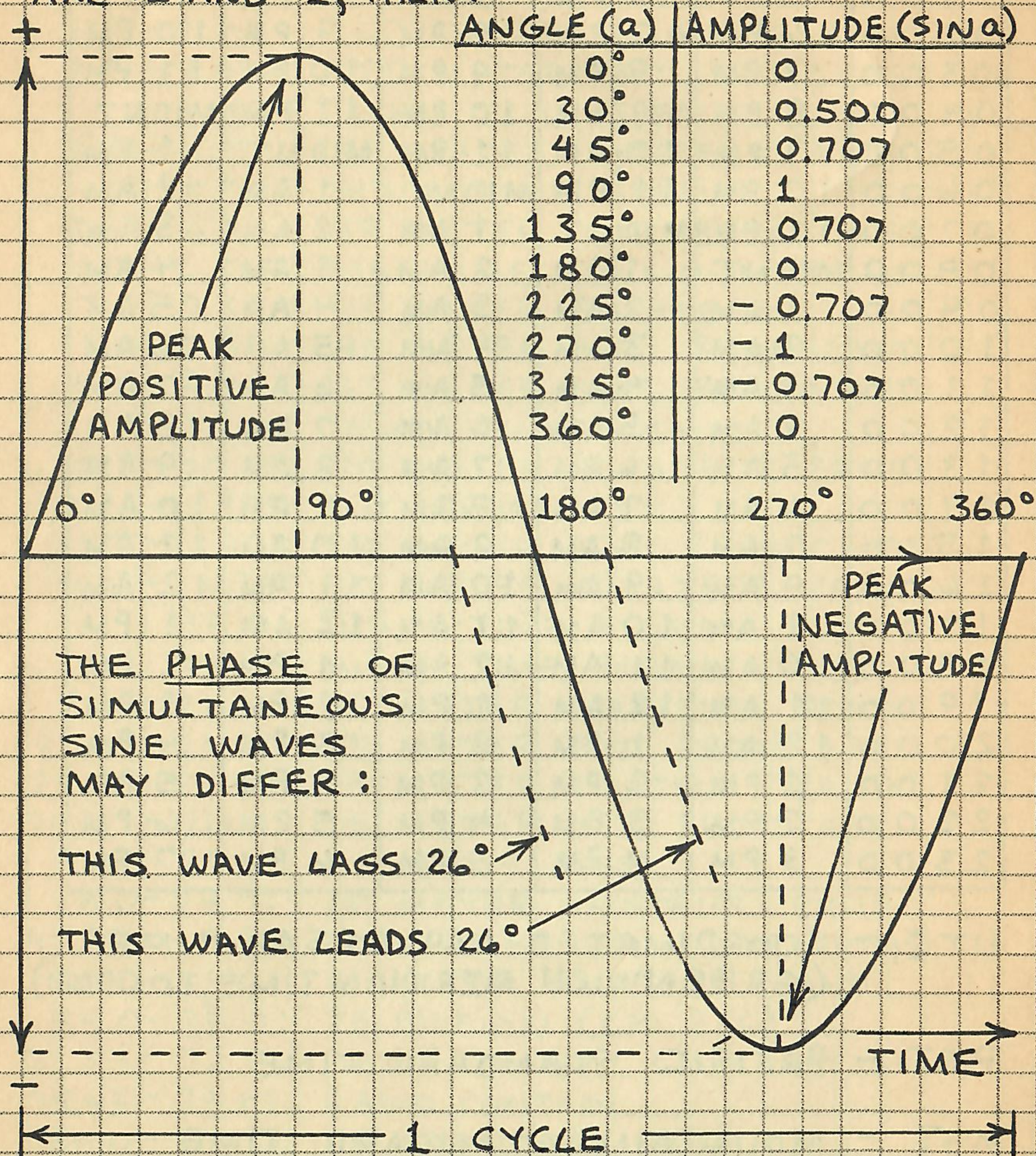


THE SINE WAVE

THE SINE OR SINUSOIDAL WAVE IS THE MOST COMMON PERIODIC WAVE IN ANALOG ELECTRONIC CIRCUITS. IF PEAK AMPLITUDES ARE +1 AND -1, THEN:



FREQUENCY OF A SINE WAVE IS THE NUMBER OF CYCLES PER SECOND. HERTZ (Hz) IS THE UNIT OF FREQUENCY. ONE HERTZ (1 Hz) IS ONE CYCLE PER SECOND (1 CPS).

PERIOD OF A SINE WAVE IS THE TIME FOR ONE COMPLETE CYCLE TO OCCUR.

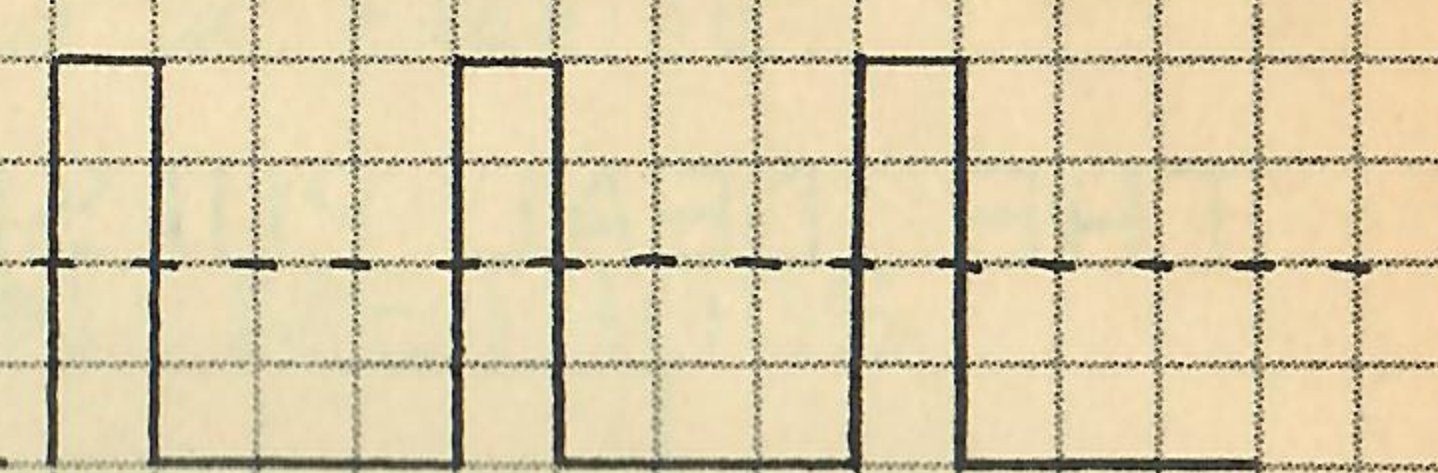
PERIODIC WAVES

MANY DIFFERENT PERIODIC WAVE FORMS CAN BE PROCESSED OR GENERATED BY ANALOG ELECTRONIC CIRCUITS. THEY INCLUDE:

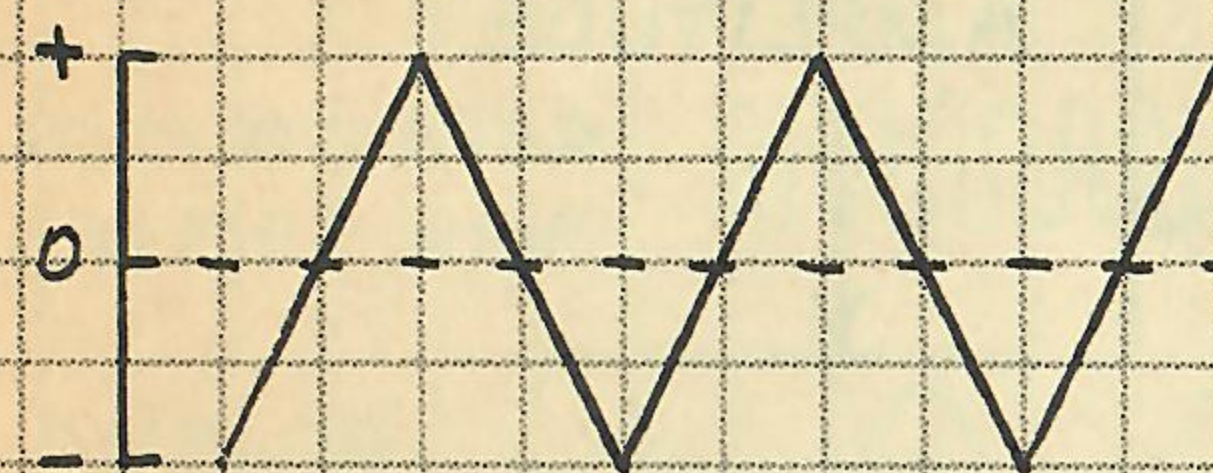
SQUARE WAVE



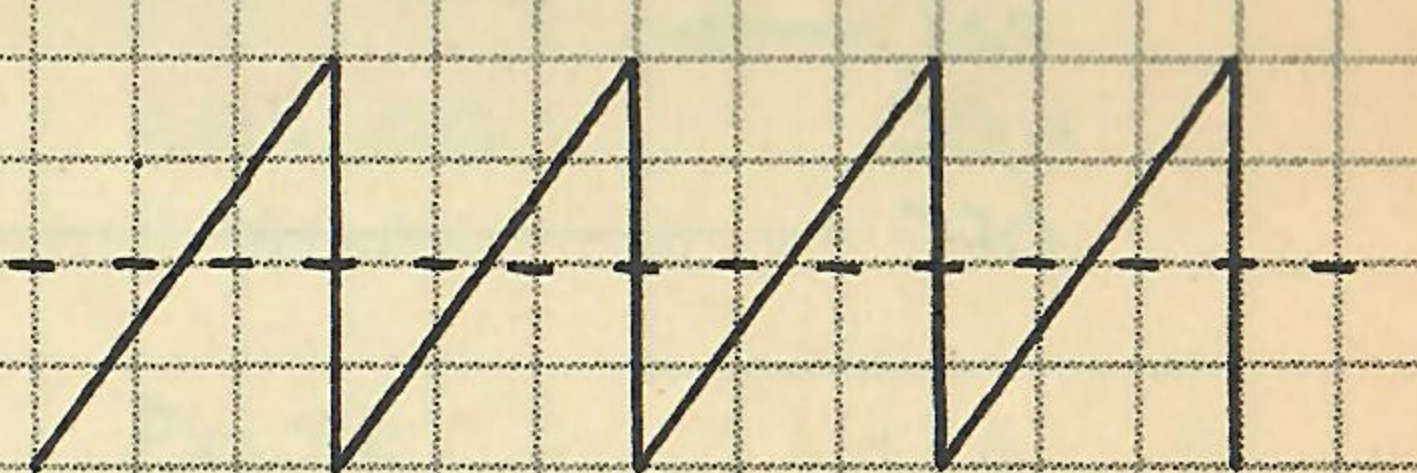
RECTANGULAR WAVE



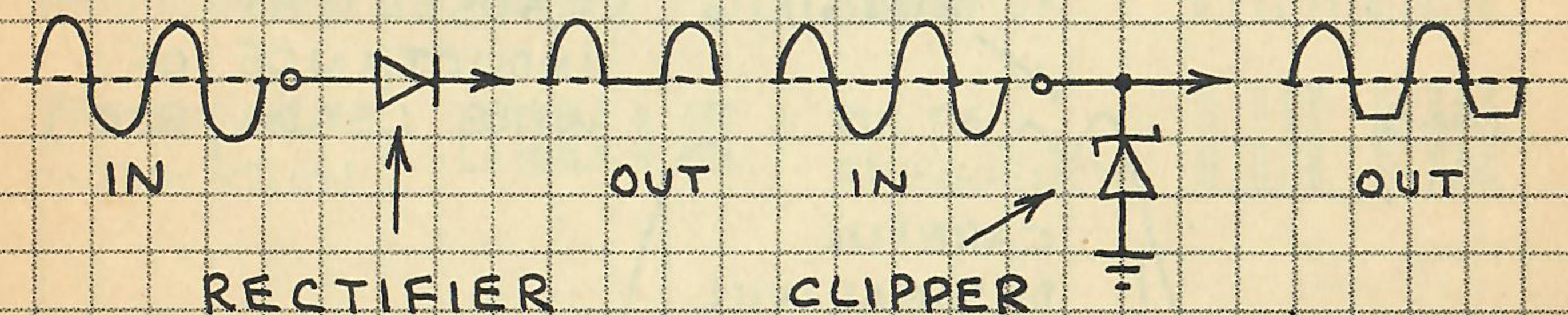
TRIANGLE WAVE



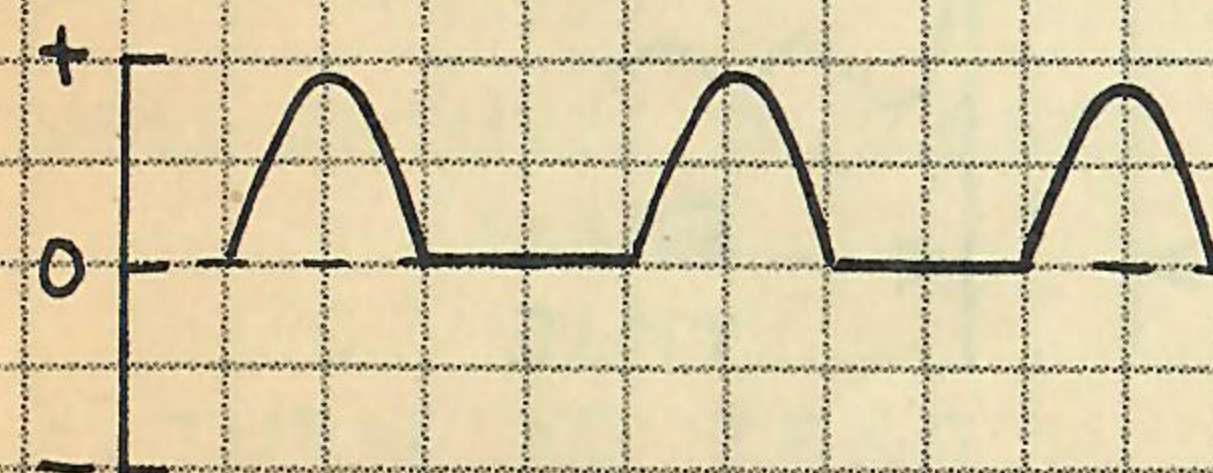
SAWTOOTH WAVE



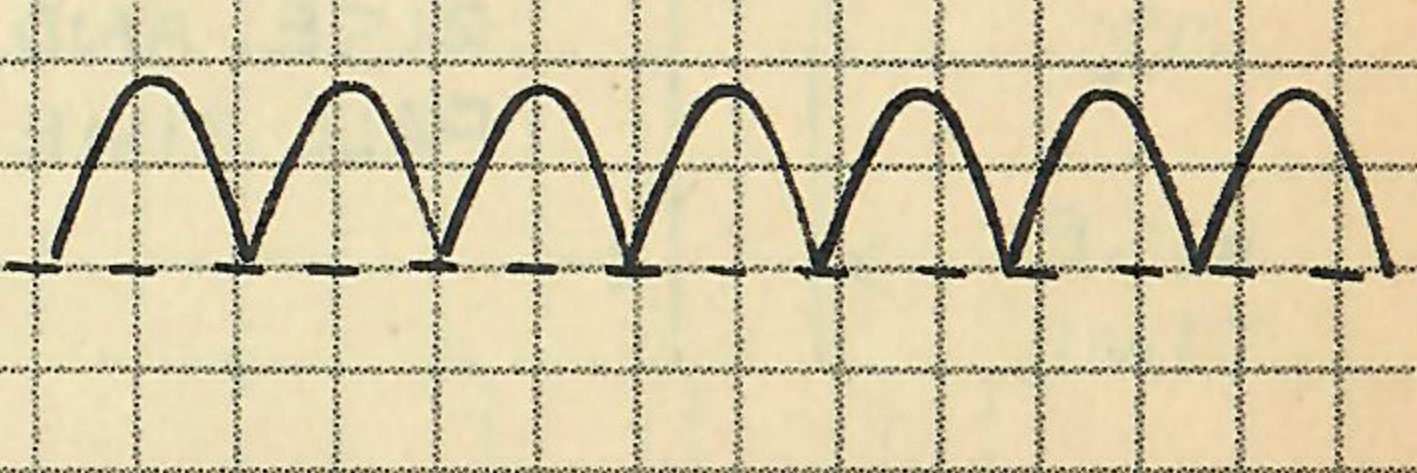
PERIODIC WAVES CAN BE RECTIFIED BY DIODES AND CLIPPED BY ZENER DIODES:



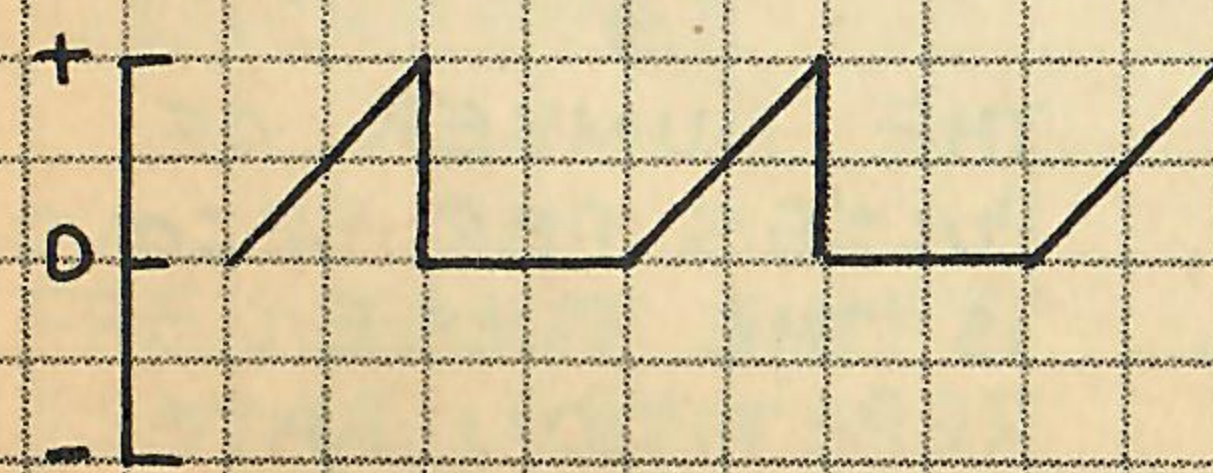
HALF-WAVE RECTIFIED SINE WAVE



FULL-WAVE RECTIFIED SINE WAVE



CLIPPED SAWTOOTH



TRAPEZOIDAL WAVE

