Report: Lab 1

1.3

(b) As time increases the graph scales up T -> T/M [M > 1], so time sin(t) -> sin(t/m).

      So as time scales to infinity, the end points of the graph do not touch the x axis an finite distance, the graph touches the x-axis at x tends to infinity.

(c) As N tends to infinity the number of frequencies in the final graph increases, as so the final graph tends more towards the square wave.

1.4

Observation: FS coefficient conversion of odd function, follows $a_k = -a_{-k}$.

        FS coefficient conversion of even function, follows $a_k = a_k$.