[lex55] Capacitor circuit II

Consider a capacitor circuit of n^2 capacitors, each with capacitance C, constructed according to the pattern shown for n = 1, 2, 3. Each column has l capacitors, where l varies between 1 and n.

- (a) Determine the equivalent capacitances C_n for $n = 1, \ldots, 4$.
- (b) What is the limiting capacitance $C_{\infty} \doteq \lim_{n \to \infty} C_n$?



Solution: