## Exercises

E24.1 [1TZ] Note: exercise 6 in the written exam 13/1/2011.

Each integer  $n \ge 1$  decomposes uniquely as  $n = 2^k d$ , with  $k \in N$  and d odd integer. Consider the sequence  $a_n = d/2^k$  and compute

(a) its upper and lower limit;(b) the set of limit points.