## Increasing sequence



A sequence  $u_1, u_2, \dots$  is called *increasing* if  $u_n \le u_{n+1}$  for all  $n \ge 1$  (so  $u_1 \le u_2 \le u_3 \le \dots$ ). It is called *strictly increasing* if  $u_n < u_{n+1}$  for all  $n \ge 1$ .

See also decreasing sequence.