## SEQUENCES AND SERIES, EXAMPLES CLASS 4.

### Supremum and infimum

Find supremum and infimum of the set $A$ if:

(1) $A = \left\{1 + \frac{1+(-1)^n}{n} : n \geq 1\right\}$

(2) $A = \{x : x \in \mathbb{Q} \text{ and } x^2 < 2\}$

(3) $A = \left\{\frac{3n^2}{1+2n^2} : n \geq 1\right\}$