

**MATH 300. INTRODUCTION TO
MATHEMATICAL REASONING.
FALL 2015.
WEEK 11 (LECTURE 20-21).
METHOD OF MATHEMATICAL INDUCTION.**

1. Reading: Section 2.4 and Lecture Notes.
2. Home assignment (Due Monday, November 16) (to submit).
 1. Problems at Sect.2.4: 6(f,h,i),7(f,h,k),,8(c,e,f).
 2. Let

$$a_1, a_2, \dots, a_n, \dots$$

be a sequence of real numbers.

Define as a predicative formula what does it means that the sequence

- 1) is monotone increasing;
- 2) is not monotone increasing;
- 3) is not monotone (neither increasing not decreasing);
- 4) is bounded;
- 5) is unbounded.