

# Calculus I.

## Real numbers and Co-ordinates

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Prof. Vlastimil Krivan

# Plan of the Semester

1. Lectures on **Monday** : (8:15-9:30)
2. Tutorials **Tuesday** : (11:30-13:00)
3. Test: **5 or 10 Tests for 30%**
4. **Final Test for 70%**
5. Grading:
  - 1  $\rightarrow$  90 – 99%
  - 1<sup>-</sup>  $\rightarrow$  80 – 89%
  - 2  $\rightarrow$  70 – 79%
  - 2<sup>-</sup>  $\rightarrow$  60 – 69%
  - 3  $\rightarrow$  50 – 59%
6. Recommended Books:
  - Calculus with Analytic Geometry by Fraleigh**

# Plan of the FIRST lecture

- ▶ Motivation
- ▶ Real Numbers
- ▶  $\sqrt{2}$  is irrational
- ▶ Inequalities
- ▶ Intervals
- ▶ absolute Value
- ▶ Coordinates in the plane

# Plan of the SECOND lecture

1. Distance
2. Coordinate Geometry
3. Functions
4. Graphs of the simple functions
5. Try to find out graph  $1/x$  in interval  $[-1,1]$
6. Recommended Books:  
    Calculus with Analytic Geometry by Fraleigh

**Best of Luck**