# The Road to Olympiads - An Exciting Journey!

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# Dedication

## Mangesh B. Rege

For showing me the wonders that mathematics held.

# Outline

# What are Mathematical Olympiads?

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- Usually students with no exposure to calculus are preferred.

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- India organized the 1996 IMO in Mumbai.

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- The ideal time is Class 10 and Class 11.

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- Finally 6 students are selected for the IMO.

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- I along with Bhaskar Upadhyay topped the Matheletics in Class 10.

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- I have made a math related website, Gonit Sora.

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- I feel in love with math!!
- Perhaps I remain the only person to top the Matheletics twice, the state Olympuad once and the RMO twice. :)

# Outline

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# Resources

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- A good mentor.

# Outline

# Negatives and Positives

- Why does negative times negative equals positive?

# Steiner-Lehmus Problem

- Prove the converse of the angle bisector theorem.

# Fermat's Little Theorem

**Theorem**

*If gcd(a,p)=1, then* $a^p \equiv a \pmod{p}$, *where p is a prime.*

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- Give yourself time and effort. Olympiads are a tough nut to crack.
- Practice makes you almost perfect!
- Remember a few standard handy tricks.

# Acknowledgements

Prof. Mangesh B. Rege (NEHU, Shillong, India)
Prof. Nayandeep Deka Baruah (Tezpur University, India)
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Mohayeminul Islam (Dhaka University, Bangladesh)
Bishal Deb (Carmel School, Digboi, India)
Carmel School, Digboi, India
Tezpur University, India

# Any Questions?

## Support Open Source!!

Thinking as well as Software.

This presentation was made using only Open Source tools.

# Thank You!