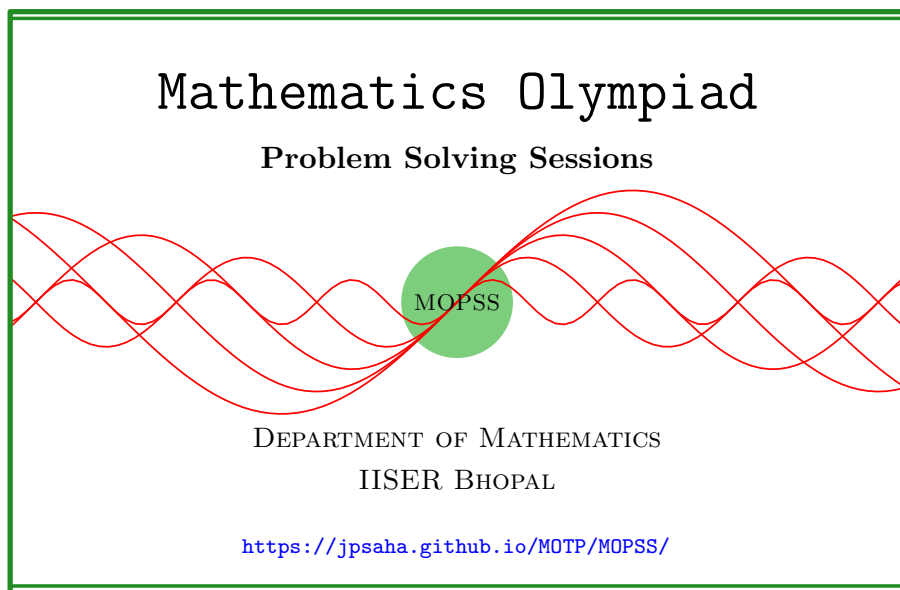


Warm up



Suggested readings

- Evan Chen's advice [On reading solutions](https://blog.evanchen.cc/2017/03/06/on-reading-solutions/), available at <https://blog.evanchen.cc/2017/03/06/on-reading-solutions/>.
- Evan Chen's [Advice for writing proofs/Remarks on English](https://web.evanchen.cc/handouts/english/english.pdf), available at <https://web.evanchen.cc/handouts/english/english.pdf>.
- [Notes on proofs](#) by Evan Chen from [OTIS Excerpts](#) [[Che25](#), Chapter 1].
- [Tips for writing up solutions](https://www.math.utoronto.ca/barbeau/writingup.pdf) by Edward Barbeau, available at <https://www.math.utoronto.ca/barbeau/writingup.pdf>.
- Evan Chen discusses why [math olympiads](#) are a valuable experience for [high schoolers](#) in the post on [Lessons from math olympiads](#), available at <https://blog.evanchen.cc/2018/01/05/lessons-from-math-olympiads/>.

List of problems and examples

1.1	Exercise (All-Russian Mathematical Olympiad 1999 Grade 9 Day 1 P1, AoPS, by S. Volchenkov)	2
-----	--	---

§1 Warm up

Exercise 1.1 (All-Russian Mathematical Olympiad 1999 Grade 9 Day 1 P1, AoPS, by S. Volchenkov). The decimal digits of a natural number A form an increasing sequence (from left to right). Find the sum of the digits of $9A$.

Walkthrough —

(a)

Solution 1.



References

[Che25] EVAN CHEN. *The OTIS Excerpts*. Available at <https://web.evanchen.cc/excerpts.html>. 2025, pp. vi+289 (cited p. 1)