

# Why do we want inverting and non-inverting amplifiers?

## Lecture 1

Note: This discussion is motivated by some online notes from Professor John M Cimbala, Penn State University

[https://www.me.psu.edu/cimbala/me345/Lectures/Tablet\\_PC\\_notes/ME345\\_Lecture\\_25.pdf](https://www.me.psu.edu/cimbala/me345/Lectures/Tablet_PC_notes/ME345_Lecture_25.pdf)

# 1. What is desirable in electronics circuits?

Generally:

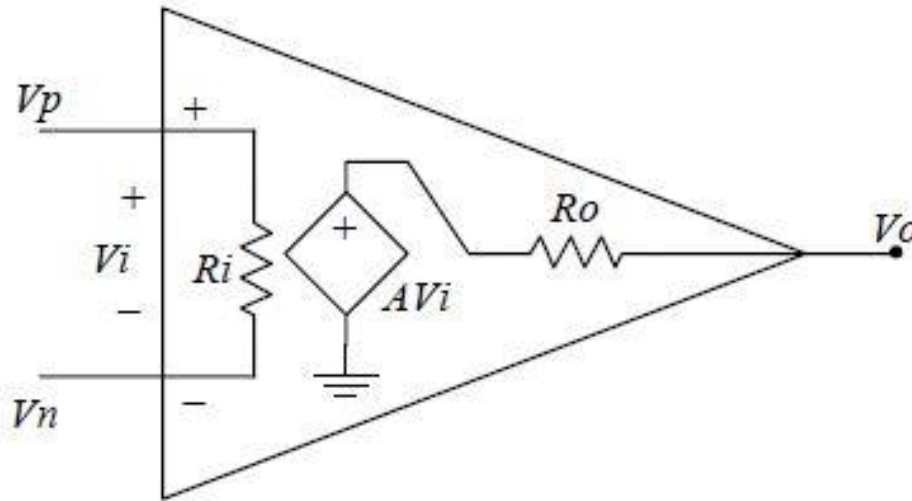
Low output impedance

High input impedance

Discuss why:

# What is the output Impedance of an Op-Amp?

- Does it matter whether it is inverting or non-inverting?



What is the input impedance of an inverting amplifier?

What is the input impedance of a Noninverting amplifier?

What is better, inverting or non inverting?