

# Inverting Operational Amplifier

## Student Group

First Name	Surname	Matrikel Nr.

## Table of Contents

Inverting Operational Amplifier .....	2
Gain of Op-Amp .....	2
Investigation of inverting input .....	3

## Inverting Operational Amplifier

### Gain of Op-Amp

Build the following circuit in [figure 1](#) with the power supply and a multimeter.



Fig. 1: Inverting Op-Amp

$U_{DD} \approx 10\text{ V}$ ,  $U_{SS} \approx -10\text{ V}$ ,  $R_1 \approx 10\text{ k}\Omega$

Calculate the necessary value for  $R_2$ , so that the Output  $U_{OUT}$  is 5 V. Use the supply voltage of the operational amplifier for  $U_{IN}$ .

$U_{IN} =$

$R_2$

### Investigation of inverting input



Fig. 2: Inverting Op-Amp: Investigate inverting input

$U_{DD} = 10V, U_{SS} = -10V, R_1 = 10k\Omega$

For  $U_{IN}, U_{OUT} \sim R_2$  use the values from [figure 2](#).

- Virt masse messen
- r2 kurzschluss

From: <https://first.mexle.te.hs-heilbronn.de/> - MEXLE Wiki

Permanent link: [https://first.mexle.te.hs-heilbronn.de/lab05\\_en/inverting\\_op-amp\\_basics\\_amplification?rev=1775055113](https://first.mexle.te.hs-heilbronn.de/lab05_en/inverting_op-amp_basics_amplification?rev=1775055113)

Last update: 2026/04/01 16:51

