

### Assignment 1 to 3.2.3.3

For a machine the following data are given:

$CI_0 := 140000$                   Initial investment

$n := 7$                               Useful life in years

For the capital invested after  $t$  years the following function is valid:

$$CI(t) := CI_0 - \frac{CI_0}{n} \cdot t \quad \text{Capital invested}$$

The average capital invested is:

$$CI_a := \frac{\int_0^n CI(t) dt}{n} \quad \text{Average capital invested}$$

Determine  $CI_a$  in figures and in symbols.