

Assignment 2 to 3.2.3.3

For a machine the following data are given:

$CI_0 := 140000$ Initial investment

$n := 7$ Useful life in years

$R_n := 40000$ Residual value at the end of useful life

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

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

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.