Consider the following results of measurements of a function P(t):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| T | 0 | 1 | 2 | 3 | 4 |
| P | 100 | 101 | 108 | 140 | 230 |

Assume that the data set can be modeled by a function P = P0 + B ta

1. Determine P0.

Use the Ln-test (logarithm) to show that the function P = P0 + B ta can be used to model the data set.

1. Use a linearized model to calculate the model parameters **a** and **b**

such that the least-squares error becomes minimal.

c) Calculate the relative model error (not the least-squares error).