Citation: Cohen, B., Lai, W. M., & Mow, V. C. (1998). A transversely isotropic biphasic model for unconfined compression of growth plate and chondroepiphysis.

## Parameters

Choose the following parameters and compute the inversion

## Setup Equations

=

=

Units of are in kPa (the same dimension as and )

Units of are non-dimensional

Units of are non-dimensional

## Laplace Solution

Finally:

## Inversion (Time) Solution

## Limit in Time Case

## Variable Manipulation to Help Laplace Limit Derivation

## Limit in Laplace Case

Calculate the dimensional value as the solution provided was divided by (C11-C12)/2 to be nondimensional

## Summary

limit of Cohen’s Laplace equation:

This can be dimensionalized to:

limit of Cohen’s time-space equation:

Therefore the inversion equation and the Laplace equation are not exactly equal as specified only because they were divided by different values to become nondimensional. Thus, their dimensional values are the same.