2D Steady Conduction - Pre-Analysis

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Problem Specification

- 1. Pre-Analysis
- 2. Geometry
- 3. Mesh
- 4. Model Setup
- 5. Numerical Solution
- 6. Numerical Results
- 7. Verification & Validation

Exercises

Comments



Problem Overview

Check your Understanding

Select true or false:

If the Biot number is increased, less heat will be exchanged between the block and the fluid bathing the right face.

(To see the answer, go to the 2D Conduction section of Module 1 in our free online course on ANSYS simulations. You need to sign in to edX.org to access the course.)

Mathematical Model

Discretization

How to Find Nodal Temperatures

How to Derive Algebraic Equations

How to Reduce the Numerical Error

Hand Calculations

Go to Step 2: Geometry

Go to all ANSYS Learning Modules