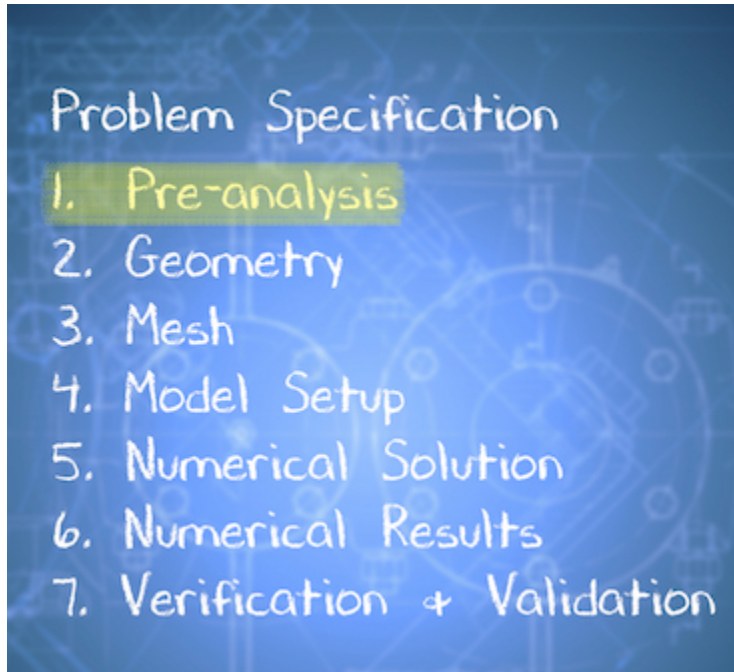


2D Steady Conduction - Pre-Analysis

Author: Rajesh Bhaskaran, Cornell University

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](#)