# Thermal Stresses in a Bar - Verification & Validation

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**Problem Specification** 

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

Exercises

Comments

## Verification & Validation

#### Note

Normally, in this step we would validate our solution by refining the mesh and then verify the solution by comparing the solution to our pre-analysis. However, let's begin by looking at the verification.

### Verification

It is always important to verify your simulation. Without verification, you have no proof that your simulation is usable. Let's compare our stress result to our pre-analysis.

	Pre- Analysis	Simulation
Stress	-1.6E8 Pa	-1.6E8 Pa

The pre-analysis matches our simulation perfectly. Therefore, there is no need to further refine the mesh.

#### **Go to Exercises**

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