## ANSYS 12 - Beam (2D Element) - Step 7

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**Problem Specification** 

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

## Step 7: Verification & Validation

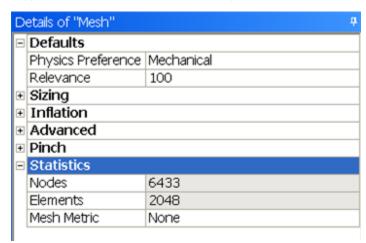
It is *very important* that you take the time to check the validity of your solution. This section leads you through some of the steps you can take to validate your solution.

## **Simple Checks**

Does the bending stress agree with the theoretical value? We checked this in step 6.

## **Refine Mesh**

Let's repeat the solution on a finer mesh with smaller element size. Repeat the mesh steps, but this time we have one additional step after inserting the mapped face mesh. Under *Details of "Mesh"*, expand *Defaults* and enter value of 100 for *Relevance*. Click *Solve* to obtain a new solution.



How does the refined mesh compare with the original mesh?

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