## Statically Determinate Frames - Indeterminate Beams

## CIVE311 - STRUCTURES I

(Wednesday, May 28, 2008)

## Exercise I



Figure I

Referring to Figure I, let $\boldsymbol{E}=\mathbf{1 0 , 0 0 0 , 0 0 0} \mathbf{~ k N} / \mathbf{m}^{\mathbf{2}}, \boldsymbol{I}=\mathbf{0 . 0 1} \mathrm{m}^{4}$, and $\boldsymbol{A}=\mathbf{0 . 5} \mathbf{m}^{2}$ throughout the frame. Neglect the own weight of the frame. Calculate the deflections at points B and C.

Calculations and Diagrams:
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## Calculations and/or Diagrams (cont'd):

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## Exercise II



Referring to Figure II, let $\boldsymbol{E I}=\mathbf{c s t}$ throughout the frame. Neglect the own weight of the frame. Find reactions and draw shear and bending moment diagrams.

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