DEFLECTION OF BEAMS (2/3)

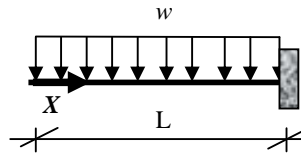# CIVE311 – STRUCTURES I

(Wednesday, April 2, 2008)

Exercise I

Figure I

1. Referring to Figure I, calculate the slope and deflection at the tip, using the Moment-Area theorems. The beam has a stiffness of EI, and its own weight is neglected.

Calculations and Diagrams:

Exercise II

P=100 kN

L/3

A

C

B

L=6 m

Cross-Section: 30x60 cm
Material: E= 20x10^6 kPa

Figure II

2. Referring to <u>Figure II</u>, calculate the slopes at A and B, the slope and deflection at C, the slope and deflection at the mid point, and the maximum deflection in the beam.

<u>Calculations and Diagrams:</u>

Calculations and Diagrams (cont'd):

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