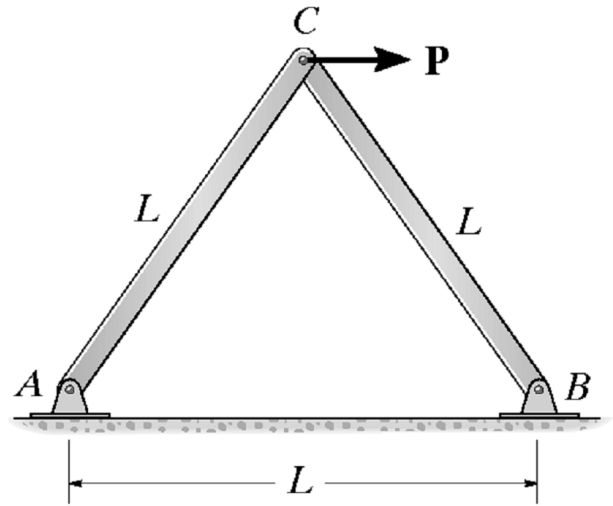


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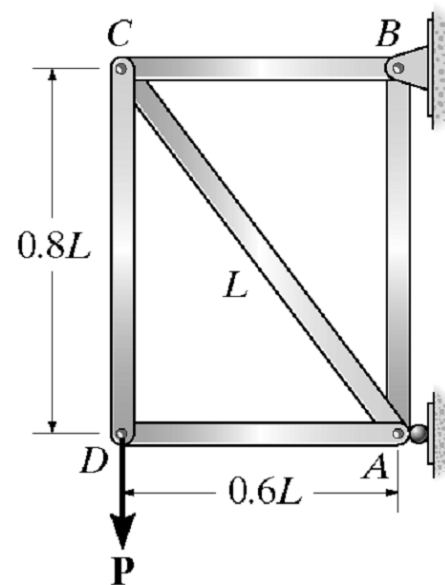
Student ID:

M27: Work & Energy

1. Determine the horizontal displacement of joint C . EA is constant.



2. Determine the vertical displacement of joint D . EA is constant.

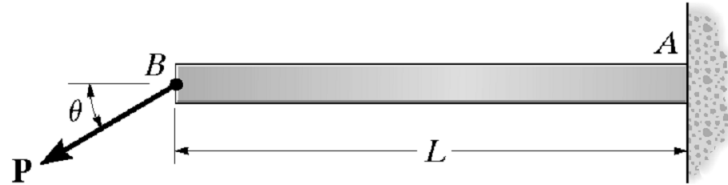


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Student ID:

M27: Work & Energy

3. The cantilevered beam has a rectangular cross sectional area A , a moment of inertial I , and a modulus of elasticity E . If a load P acts at point B as shown, determine the displacement at B in the direction of P , accounting for bending and axial force.



4. The steel bars are pin connected at B and C . If they each have a diameter of 30 mm, determine the slope at E . $E_{st} = 200$ GPa.

