Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Assignment 5 (4p)**

The rectangle plate shown, of thickness, length and width , , and *H,* is simply supported on edges where  and free on the remaining edges where , and loaded by pressure *p* acting on the upper surface. Young’s modulus  and Poisson’s ratio are constants. Determine the parameter  of the approximation . Use the principle of virtual work in form  and

*x,X*

*y*,*Y*

*H*

*L*

*E*, *ν*, *t*

*p*

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