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

**Assignment 5**

Determine the angular speed of free vibrations for the thin triangular slab shown. Assume plane stress conditions. The material properties *E*, , and thickness  of the slab are constants. Use the approximations  and  in which the nodal value  is a function of time.

*X,x*

1

2

3

*L*

*L*

1

*Y,y*