

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

## Assignment 5

A circular plate of radius  $R$ , which is simply supported at the outer edge, is loaded by force  $F$  at the center point. Use the Kirchhoff plate model to find the transverse displacement at the center point. Use the approximation  $w = a_0(x^2 + y^2 - R^2)$  for the transverse displacement. Material properties  $E$ ,  $\nu$  and thickness  $t$  are constants.

