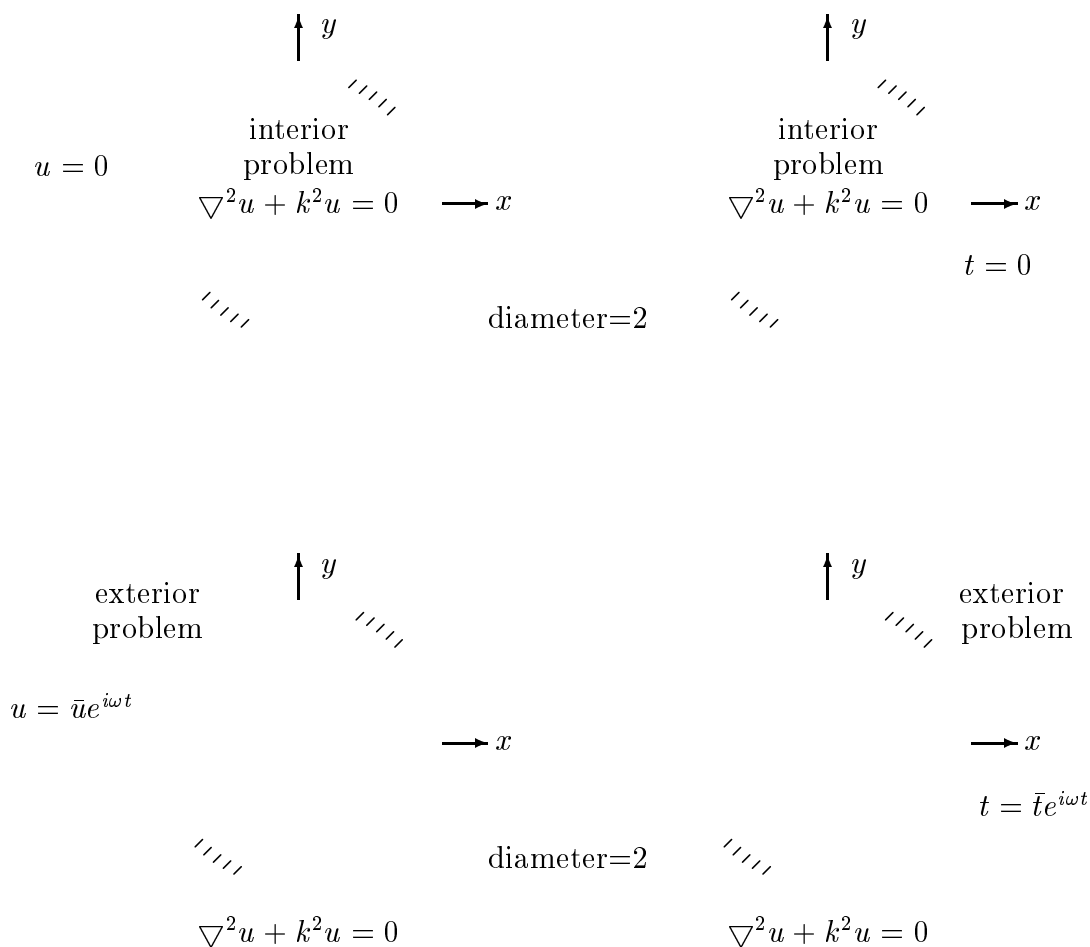


程式 24 Focusing and whispering gallery modes



(1). Find the focusing modes for the Neumann problem

$$u(r, \theta) = J_0(\lambda'_{0,20} r)$$

(2). Find the whispering gallery modes for the Neumann problem

$$u(r, \theta) = J_4(\lambda'_{4,4} r) e^{i4\theta}$$

(3). Find the whispering gallery modes for the Dirichelet problem

$$u(r, \theta) = J_5(\lambda_{5,1} r) e^{i5\theta}$$

(4). Find the whispering gallery modes for the Dirichelet problem

$$u(r, \theta) = J_8(\lambda_{8,1} r) e^{i8\theta}$$