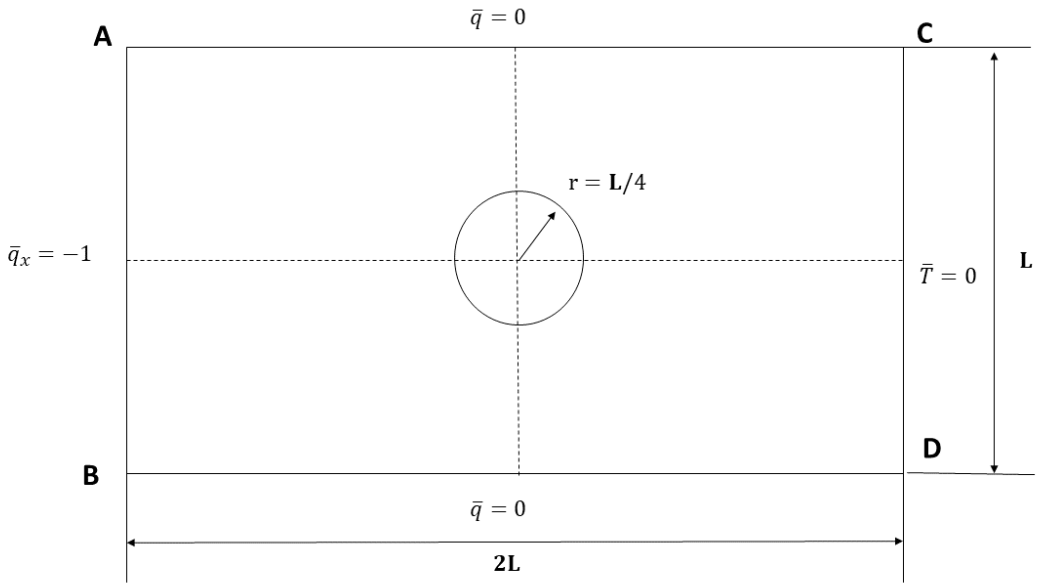
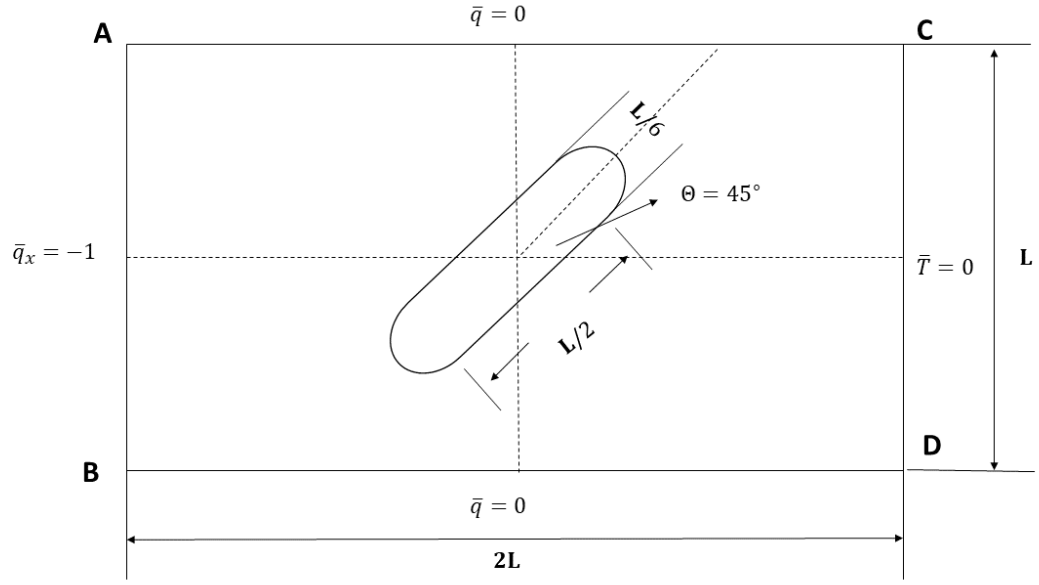


(a) Heat flux around a circular object



(b) Heat flux around a rounded object

And the boundary conditions are given as:

$\acute{q}_x = -1$ on AB (Γ_q)
$\acute{q} = 0$ on AC and BD (Γ_q)
$\acute{q} = 0$ on the obstacle boundary (Γ_q)
$\acute{T} = 0$ on CD (Γ_T)
Note that there is no source in this problem.

(s=0)

The conductivity k = 1, and L = 10.