

# Finite element analysis – Problem Sheet 1

1. Find the potential and electric field at the point (0.4,0.3) in the trough shown in Figure 1, if  $d=1.6\text{m}$ ,  $b=1.2\text{m}$  and  $V_0=100\text{V}$

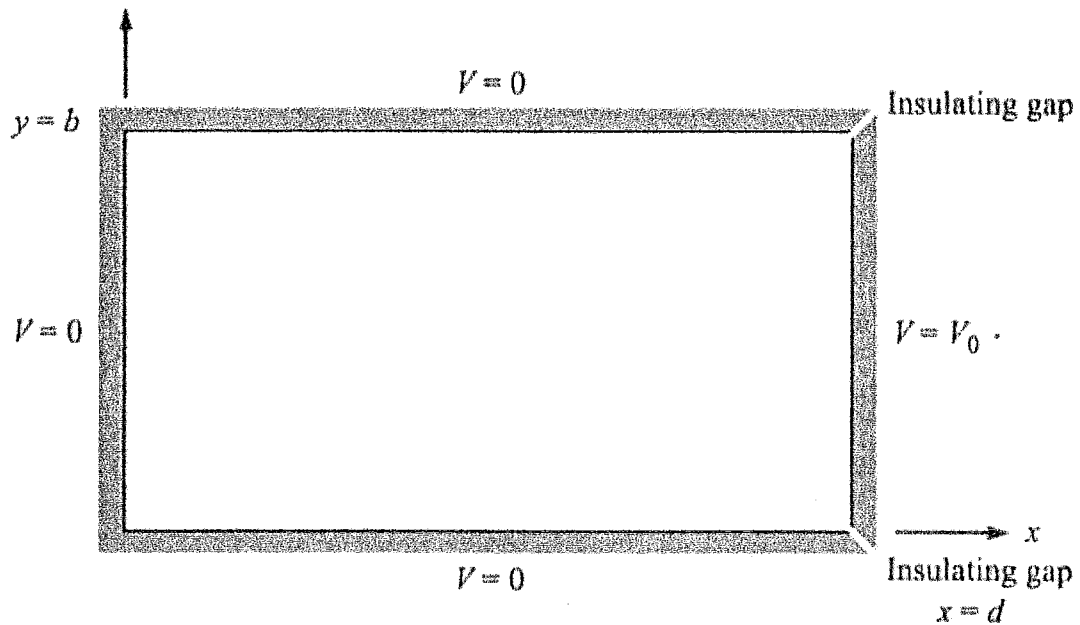


Figure 1

2. Plot a graph of the variation in the voltage along a path from (0,0.6) to (1.6, 0.6)
3. Solve the problem by representing and meshing only half the trough.