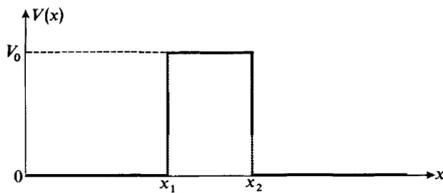
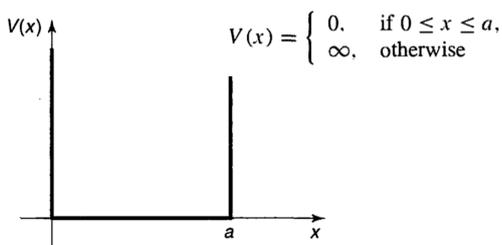


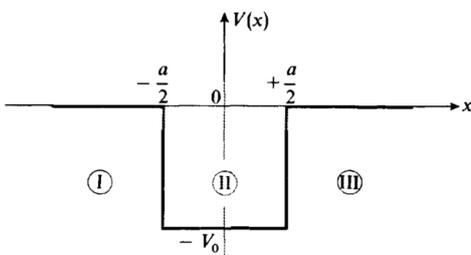
1) Consider a particle of energy  $E$  which, coming from region of negative  $x$ , arrives at the potential “step” of height  $V_0$  shown in the figure. Find the probability of reflection and transition for  $E > V_0$  and  $E < V_0$ .



2) Consider a particle of energy  $E$  which, coming from left side of barrier. Find the transition probability for  $E < V_0$ .



3) Find the energy levels and wave-function of particle.



4) Find the bound state energy level of particle in the quantum well.