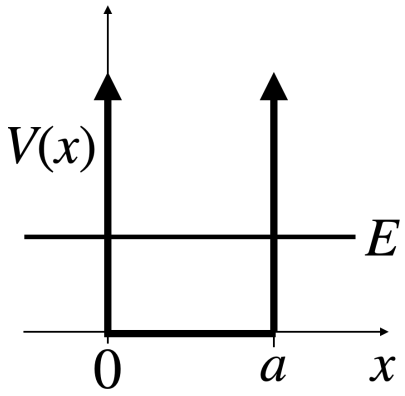
PHYS2063 Wave Physics Homework #22 Due Thursday 17 Nov 2022

This homework assignment is due at the start of class on the date shown. You may submit a PDF of your solutions to the Canvas page for the course, or bring a paper copy to class.

In class we derived the wave functions and energy levels for the infinite square well in one dimension with width a, where the well was placed symmetrically between $x = -a/2$ and $+a/2$. Show that you get the same solution, for the normalized wave functions as well as the energy levels, if you instead place one side of the well at $x = 0$, namely



You will find that the solution follows very closely from our work from several weeks ago on standing waves on a stretched string.