

Print view of 'FreeParticlePretest'[Print this page](#)

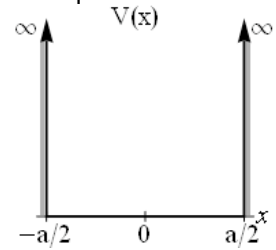
Please type your name in the form: Last, First:

NOTE!! Please type in your CU userid (that's the username you use to log in to CULearn. We do NOT want your password. It probably looks like your last name, perhaps with a few extra characters. Note that it is definitely NOT your numerical (9 digit) student ID!!

This script cannot "error check", you have to be sure you type it in correctly! Thanks

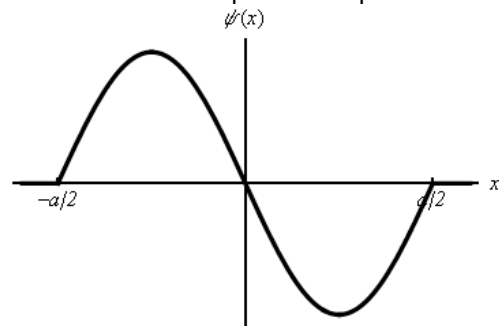
Please type your CU userid:

For each of the questions below, you are given a plot of a wave function and are asked if this is a physically possible wave function for a particle confined to a one-dimensional infinite square well as shown at right.



Q1:

a) Is this wave function physically possible for a particle confined to the infinite square well potential above?

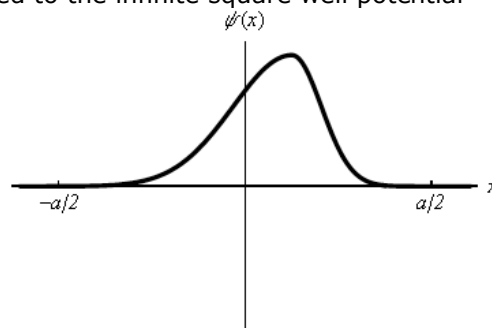


- ☒ Select one...
- ☐ Definitely yes
- ☐ It depends (specify below)
- ☐ No, this is not an allowed wave function

b) Explain your answer. That is, explain how you know whether or not the wave function is allowed. If you answered 'It depends', describe under which conditions the wave function is physically allowed:

Q2:

a) Is this wave function physically possible for a particle confined to the infinite square well potential above?

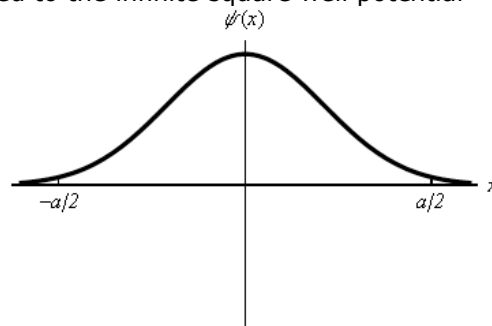


- ☒ Select one...
- ☐ Definitely yes
- ☐ It depends (specify below)
- ☐ No, this is not an allowed wave function

b) Explain your answer. That is, explain how you know whether or not the wave function is allowed. If you answered 'It depends', describe under which conditions the wave function is physically allowed:

Q3:

a) Is this wave function physically possible for a particle confined to the infinite square well potential above?

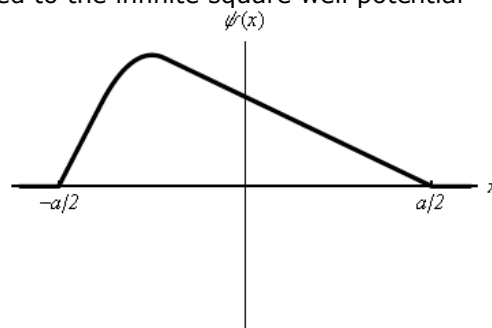


- ☒ Select one...
- ☐ Definitely yes
- ☐ It depends (specify below)
- ☐ No, this is not an allowed wave function

b) Explain your answer. That is, explain how you know whether or not the wave function is allowed. If you answered 'It depends', describe under which conditions the wave function is physically allowed:

Q4:

a) Is this wave function physically possible for a particle confined to the infinite square well potential above?

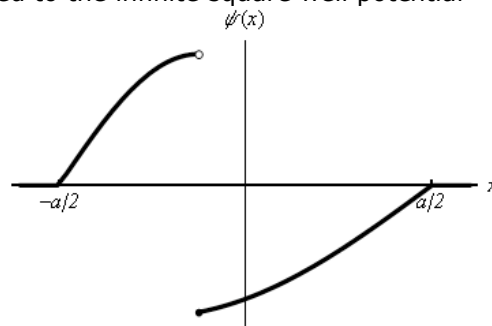


- ☒ Select one...
- ☐ Definitely yes
- ☐ It depends (specify below)
- ☐ No, this is not an allowed wave function

b) Explain your answer. That is, explain how you know whether or not the wave function is allowed. If you answered 'It depends', describe under which conditions the wave function is physically allowed:

Q5:

a) Is this wave function physically possible for a particle confined to the infinite square well potential above?



- ☒ Select one...
- ☐ Definitely yes
- ☐ It depends (specify below)
- ☐ No, this is not an allowed wave function

b) Explain your answer. That is, explain how you know whether or not the wave function is allowed. If you answered 'It depends', describe under which conditions the wave function is physically allowed:

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