



## *Comisión Presidencial de Apoyo al Desarrollo Provincial*

Santo Domingo, República Dominicana

“AÑO DE LA CONSOLIDACION DE LA SEGURIDAD ALIMENTARIA”

18 de marzo del 2020.-

Al : **Lic. FRANCISCO DEL VALLE RAMIREZ**  
Presidente Comisión Presidencial de Apoyo al Desarrollo  
Provincial.

Asunto: : Solicitud adquisición de tickets de combustible.

Cortésmente, me permito solicitar la autorización correspondiente, para la adquisición de tickets prepagado de combustible, para uso en los diferentes vehículos asignados a esta comisión presidencial, correspondiente a los meses abril, mayo, junio y julio del 2020.



**Ing. DELIS ALCANTARA ANGOMAS**  
Enc. Administrativo.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 350

PROBLEM SET 1

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

SECTION: \_\_\_\_\_

PROBLEM 1

Consider a particle of mass  $m$  moving in a potential  $V(x)$ . The energy levels are given by  $E_n$ .

Find the wave function  $\psi(x)$  for the ground state.

Use the WKB approximation to find the energy levels for large  $n$ .

Compare the results with the exact solution for the harmonic oscillator.

Discuss the validity of the WKB approximation in the limit of large  $n$ .

What is the significance of the turning points in the WKB approximation?

How does the wave function behave near the turning points?

What is the connection between the WKB approximation and the Bohr-Sommerfeld quantization condition?

Can you explain the physical meaning of the quantization condition?

How does the WKB approximation break down near the turning points?

What are the connection formulas for the wave function across the turning points?

How do these connection formulas relate to the asymptotic behavior of the wave function?

What is the significance of the phase shift in the connection formulas?

How does the phase shift depend on the potential and the energy?



**COMISION PRESIDENCIAL DE APOYO AL DESARROLLO PROVINCIAL**  
**RNC.401506688**  
**TICKES DE COMBUSTIBLES**

CANTIDAD	DENOMINACION	TOTAL	
680	1,000.00	680,000.00	
400	500.00	200,000.00	
100	200.00	20,000.00	
		<b>900,000.00</b>	



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