


Digital Self-Learning
Material Development
2002

Physics Grade 11

How to Use the Course
The Lesson
About the Course



لغة عربية

Teacher Menu
Map & Index
Collaboration
Supplement
Glossary
Home



I Love Physics

Jordan Physics digital material development

JAPAN
Official Development Assistance

Powered by Menhaj Educational Technologies®

[FrontPage Save Results Component]

Top page (English version)

مشروع حوسبة لمادة الفيزياء
٢٠٠٢
الفيزياء للسف الحادي عشر

* كيف تستخدم هذا الموقع
* للدروس المعقوفة
* عن هذا الموقع

English

قائمة المعلم
خريطة الموقع
قوات التواصل
معلومات اضافية
قائمة المصطلحات
الصفحة الرئيسية



أنا أحب الفيزياء

مشروع حوسبة مادة الفيزياء




JAPAN
Official Development Assistance

Powered by Menhaj Educational Technologies®

Top page (Arabic version)

Jordan Physics Digital Material Development

Chapter 9 (←)
Chapter 10

- Oscillatory motion as a pattern of motion
- Simple harmonic motion in simple pendulum
- Relation of simple harmonic motion to uniform circular motion
- Wave Motion
- Characteristics of mechanical waves (reflection and refraction)
- Properties of waves "Interference"
- Standing waves
- Interference of light Waves
- Diffraction of waves
- Diffraction of light waves
- Polarization of light
- Polarization of light by reflection

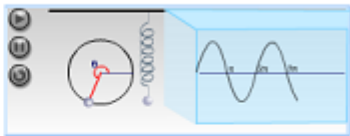
Teacher Menu
Map & Index
Collaboration
Supplement
Glossary
Home

Relation of simple harmonic motion to uniform circular motion

The general formula for the displacement of an object moving in SHM

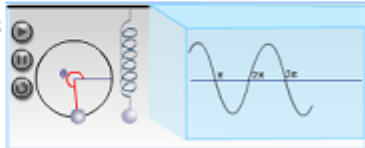
1. The vertical displacement (y) for vibrating body moved from the equilibrium can be represented by the following formula:

$$y = A \sin(\omega t)$$



2. If the body starts moving from any point different from the point of equilibrium, the displacement (y) can be represented by the following formula:

$$y = A \sin(\omega t + \phi)$$



where ϕ is the angle which defines the condition of waves beginning. And this angle is called the phase constant ($\omega t + \phi$): phase angle.

Copyright © 2002

Lesson Menu << Back Next >>

Explanation and Animation (1)

Jordan Physics Digital Material Development

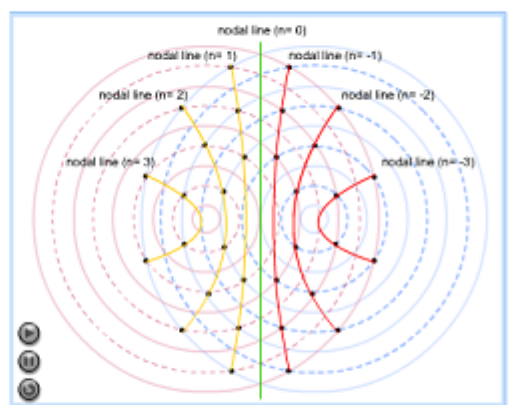
Chapter 9 (←)
Chapter 10

- Oscillatory motion as a pattern of motion
- Simple harmonic motion in simple pendulum
- Relation of simple harmonic motion to uniform circular motion
- Wave Motion
- Characteristics of mechanical waves (reflection and refraction)
- Properties of waves "Interference"
- Standing waves
- Interference of light Waves
- Diffraction of waves
- Diffraction of light waves
- Polarization of light
- Polarization of light by reflection

Teacher Menu
Map & Index
Collaboration
Supplement
Glossary
Home

Properties of waves "interference"

Interference of water waves



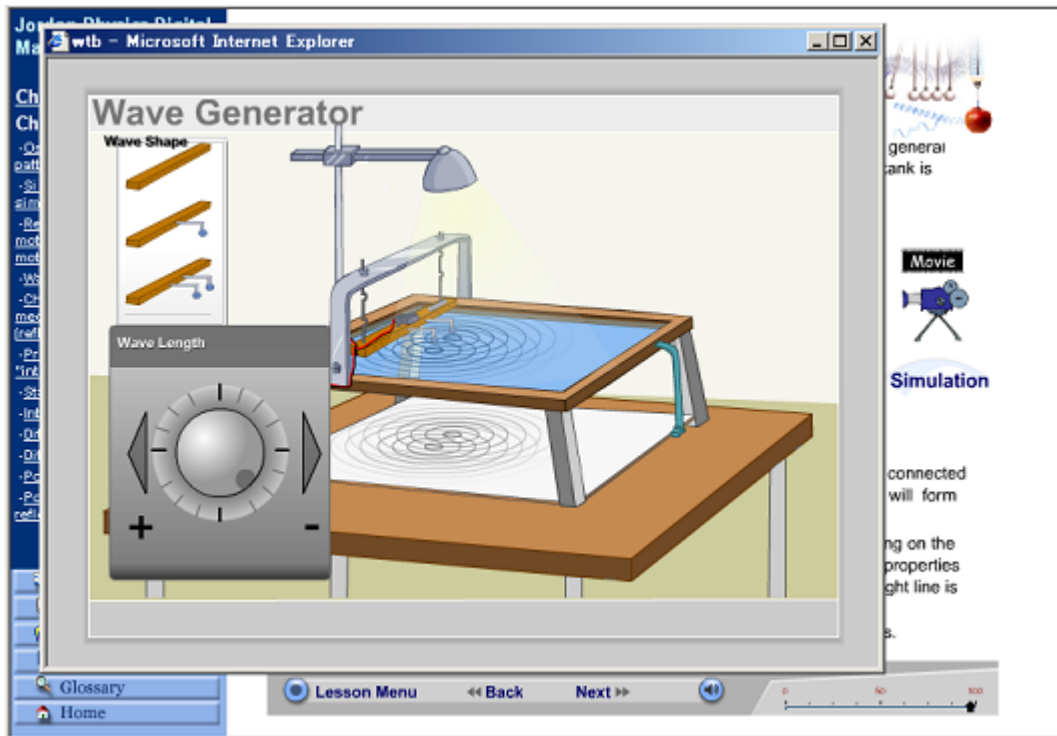
But if the amplitudes of the two waves are different, then the amplitude of the resulting wave is equal to the difference in the amplitudes of the interfering waves.

Simulation

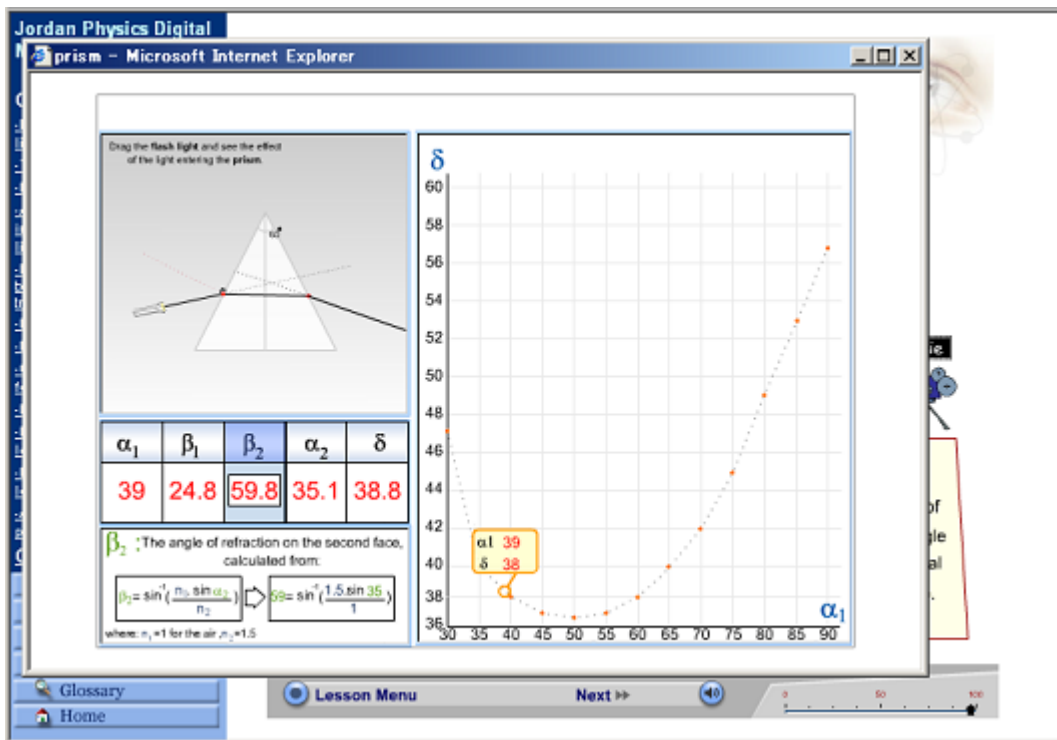
Copyright © 2002

Lesson Menu << Back Next >>

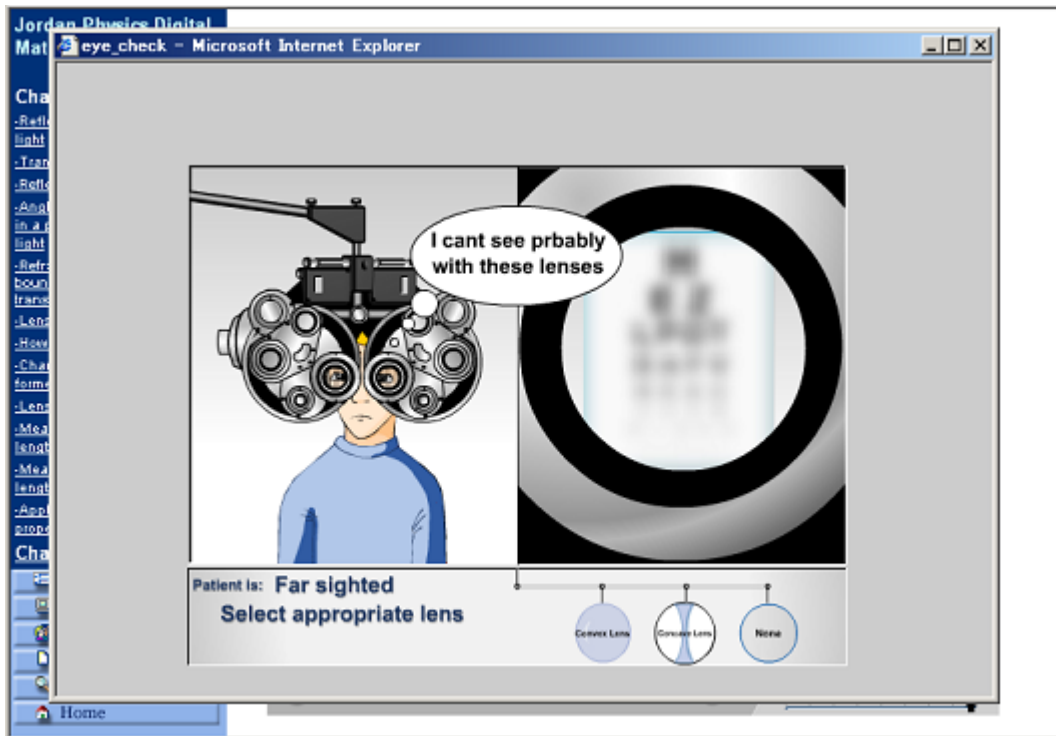
Explanation and Animation (2)



Simulation (Virtual Lab)



Simulation (Model)



Simulation (Game)



Movie