Uni J

Instructions انتهي هناك فرض الاكمال

انتبهي هناك حظر الرجوع

| | |
|---|---|
| Timed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires. Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
| Multiple Attempts | Not allowed. This test can only be taken once. |
| Force Completion | This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test. This test does not allow backtracking. Changes to the answer after submission are prohibited. |

**Remaining Time: 19 minutes, 08 seconds.**

Quiz (L C1 → 2))

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

$F' = F\left(\frac{V + V_o}{V - V_s}\right)$

Question **1** of **10**

**Question 1**

**0.5 points** ✔ Saved

**The following equation represent the frequency in the case of** $f' = f\left(\frac{V}{V + V_s}\right)$

$V_o = 0$ $V_s = -V_o$

The Observer Is Moving Relative to a Stationary Source (moving toward)

a.

b. The Observer Is Moving Relative to a Stationary Source (away from)

c. Source Is Moving Relative to a Stationary Observer (moving toward) ✗

d. Source Is Moving Relative to a Stationary Observer (away from) ✓

⚠ Moving to the next question prevents changes to this answer.

Question **1** of **10**

انتهي هناك حظر الرجوع

| | |
|---|---|
| Timed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires. Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
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**Remaining Time: 18 minutes, 18 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question **2** of **10**

$F' = F\left(\frac{V+V_0}{V-V_s}\right)$

**Question 2**

**0.5 points** Saved

**In Doppler effect A negative sign for motion of the observer or the source _____ the other.**

a. toward

b. remains the same

c. away from

d. none off them

⚠ Moving to the next question prevents changes to this answer.

Question **2** of **10**

Instructions انتهي هناك فرض الاكمال

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Force Completion This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test. This test does not allow backtracking. Changes to the answer after submission are prohibited.

**Remaining Time: 16 minutes, 39 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question **3** of **10**

**Question 3**

**0.5 points** ✔ Saved

**infrasonic waves have frequencies……the audible range**

a. within

b. above

c. below

d. equal

⚠ Moving to the next question prevents changes to this answer.

Question **3** of **10**

Instructions انتهي هناك فرض الاكمال

انتبهي هناك حظر الرجوع

Timed Test This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires.
Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain.

Multiple Attempts Not allowed. This test can only be taken once.

Force Completion This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.
This test does not allow backtracking. Changes to the answer after submission are prohibited.

**Remaining Time: 16 minutes, 12 seconds.**

**Question Completion Status:**

Moving to the next question prevents changes to this answer.

Question **4** of **10**

**Question 4**

**0.5 points** Save Answer

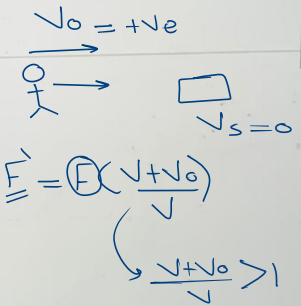
**As a person walks towards the speaker, the frequency he or she hears**

a. Increase

b. increases or decreases, depending on temperature

c. remains the same

d. decreases




Moving to the next question prevents changes to this answer.

Question **4** of **10**

| | |
|---|---|
| Instructions | انتهي هناك فرض الاكمال<br>انتبهي هناك حظر الرجوع |
| Timed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires.<br>Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
| Multiple Attempts | Not allowed. This test can only be taken once. |
| Force Completion | This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.<br>This test does not allow backtracking. Changes to the answer after submission are prohibited. |

**Remaining Time: 14 minutes, 00 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question 5 of 10

**Question 5**

**0.5 points** ✔ Saved

**The speed of the waves of frequency 150 Hz and the wavelength of 3 m is :**

a. 0.45 m/s

b. 450 m/s

c. 50 m/s

d. 100 m/s

F λ

$v = \lambda f = 3(150) = 450\ m/s$

⚠ Moving to the next question prevents changes to this answer.

Question 5 of 10

انتبهي هناك حظر الرجوع

| | |
|---|---|
| ed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires. Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
| tiple Attempts | Not allowed. This test can only be taken once. |
| ce Completion | This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test. |
| | This test does not allow backtracking. Changes to the answer after submission are prohibited. |

**emaining Time: 11 minutes, 19 seconds.**

**Question Completion Status:**

Moving to the next question prevents changes to this answer.

Question **6** of **10**

**Question 6**

**0.5 points** Saved

**If time period of an oscillation is 0.40 s, then it's frequency is**

$F = \frac{1}{T} = \frac{1}{0.4} = 2.5\ Hz$

a. 2.5 Hz

b. 3.5 Hz

c. 3Hz

d. 2Hz

Moving to the next question prevents changes to this answer.

Question **6** of **10**

Multiple Attempts Not allowed. This test can only be taken once.

Force Completion This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.

This test does not allow backtracking. Changes to the answer after submission are prohibited.

**Remaining Time: 10 minutes, 37 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

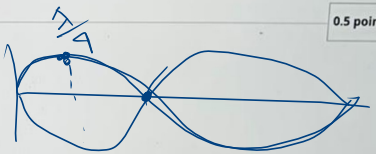
Question **7** of **10**

**Question 7**

**0.5 points** Save Answer

1

**In standing waves the first position of the antinodes equal to**



a. $x = 2\lambda$

b. $x = \lambda/2$

c. $x = \lambda/4$

d. $x = \lambda$

⚠ Moving to the next question prevents changes to this answer.

Question **7** of **10**

Multiple Attempts Not allowed. This test can only be taken once.

Force Completion This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.

This test does not allow backtracking. Changes to the answer after submission are prohibited.

**Remaining Time: 07 minutes, 15 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

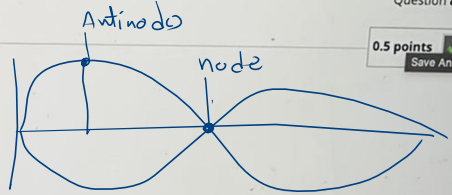
Question 8 of 10

**Question 8**

0.5 points ✔ Saved

Save Answer for Question 8

1. **The distance between a node and an adjacent antinode is**




a. $x = 2\lambda$

b. $x = \lambda$

c. $x = \lambda/4$

d. $x = \lambda/2$

⚠ Moving to the next question prevents changes to this answer.

Question 8 of 10

انتبهي هناك حظر الرجوع

| | |
|---|---|
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**Remaining Time: 06 minutes, 18 seconds.**

**Question Completion Status:**

Moving to the next question prevents changes to this answer.



**Question 9**

**0.5 points** Saved

**A sinusoidal wave moving in the positive x direction with a wavelength of 3.14 cm the wave number K is :**

λ

a. 3.14 rad/cm

b. 200 rad/cm

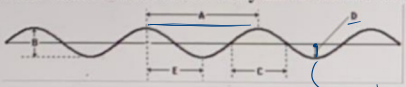
c. 2 rad/cm

d. 314 rad/cm

$K = \frac{2\pi}{\lambda} = \frac{2\pi}{3.14} = 2\ rad/cm$

Moving to the next question prevents changes to this answer.

What measurement is shown by line D on this wave?




Amplitude

a. distance
b. wavelength
c. amplitude
d. frequency

Moving to the next question prevents changes to this answer.

**Question 1**

**The Sound Waves are an example of**

a. transverse waves

b. longitudinal waves

c. surface waves

d. standing waves

Moving to the next question prevents changes to this answer.

on Completion Status:

Moving to the next question prevents changes to this answer.

Questic

on 5

0.5 points

e superposition to two sinusoidal waves traveling in the same direction in a linear medium have destructive interference if:

$= A\sin(kx-\omega t+\phi)$ $y_1 = A\sin(kx-\omega t)$

$\phi = \pi$ , $3\pi, 5\pi$

a. The phase constant φ equal π/2

b. The phase constant φ equal 2 π

c. The phase constant φ equal 0

a- The phase constant φ equal π

Moving to the next question prevents changes to this answer.

Question 5

Remaining Time: 09 minutes, 28 seconds.

Question Completion Status:

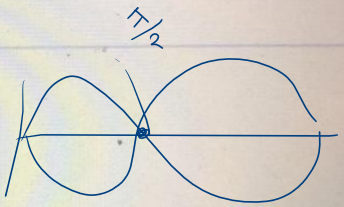
Moving to the next question prevents changes to this answer.

Question 8

0.5 poi

1

In standing waves the first position of the nodes equal to




a. $x = 2\lambda$

b. $x = \lambda/4$

c. $x = \lambda$

d. $x = \lambda/2$

Moving to the next question prevents changes to this answer.

Remaining Time: 06 minutes, 43 seconds.

Question Completion Status:

Question 10

0.

A sinusoidal wave moving in the positive x direction with a wavelength of 3.14 cm the wave number K is :

a. 3.14 rad/cm

b. 200 rad/cm

c. 314 rad/cm

d. 2 rad/cm

Click Submit to complete this assessment.

uestion Completion Status:

⚠ Moving to the next question prevents changes to this answer.

estion 7

interference occurs

a. when one waves travels alone

b. occurs when two or more waves combine and neutralize each other

c. when the two waves travels together

d. occurs when two or more waves overlap and combine

⚠ Moving to the next question prevents changes to this answer.

## Question 5

**Destructive interference is**

a. Are in phase

b. The two waves add together and produce a single wave of greater amplitude

c. Are in opposite phase

d. When the two waves affect each other in a negative way

Remaining Time: 14 minutes, 47 seconds.

Question Completion Status:

Moving to the next question prevents changes to this answer.

**Question 4**

$V_o = -V_o$ $V_s = 0$

**The following equation represent the frequency in the case of** $f' = f\left(\frac{v - v_o}{v}\right)$ $f' = \left(\frac{V + V_o}{V - V_s}\right) f$ $V_o$

a. The Observer Is Moving Relative to a Stationary Source (away from)

b. The Observer Is Moving Relative to a Stationary Source (moving toward)

c. Source Is Moving Relative to a Stationary Observer (moving toward)

d. Source Is Moving Relative to a Stationary Observer (away from)

Moving to the next question prevents changes to this answer.

انتبهي هناك حظر الرجوع

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|---|---|
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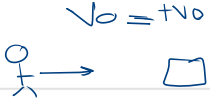
| | This test does not allow backtracking. Changes to the answer after submission are prohibited. |

**Remaining Time:** **16 minutes, 09 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question **2** of **10**




**Question 2**

**0.5 points** Save Answer

**As a person walks towards the speaker, the frequency he or she hears**

a. decreases

b. Increase

c. remains the same

d. increases or decreases, depending on temperature

⚠ Moving to the next question prevents changes to this answer.

Question **2** of **10**

| | |
|---|---|
| Timed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires. Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
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| | This test does not allow backtracking. Changes to the answer after submission are prohibited. |

**Remaining Time:** **14 minutes, 44 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question **3** of **10**

**Question 3**

**0.5 points** Saved

$V_o = 0$

$V_s = -V_e$

**The following equation represent the frequency in the case of** $f' = f\left(\frac{V}{V + V_s}\right)$

a. Source Is Moving Relative to a Stationary Observer (moving toward)

b. The Observer Is Moving Relative to a Stationary Source (moving toward)

c. Source Is Moving Relative to a Stationary Observer (away from)

d. The Observer Is Moving Relative to a Stationary Source (away from)

⚠ Moving to the next question prevents changes to this answer.

Question **3** of **10**

Force Completion This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.

This test does not allow backtracking. Changes to the answer after submission are prohibited.

Remaining Time: **13 minutes, 55 seconds.**

Question Completion Status:

Moving to the next question prevents changes to this answer.

Question **4** of **10**

**Question 4**

**0.5 points** Saved

**Sound level β is defined by the equation:**

a. $\beta = 10Log(\frac{I_0}{I})$

b. $\beta = Log(\frac{I_0}{I})$

c. $\beta = 10Log(\frac{I}{I_0})$

d. $\beta = Log(\frac{I}{I_0})$

Moving to the next question prevents changes to this answer.

Question **4** of **10**

| | |
|---|---|
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Remaining Time: **12 minutes, 20 seconds.**

Question Completion Status:

Moving to the next question prevents changes to this answer.

Question **5** of **10**

**Question 5**

**0.5 points** Saved

**A sinusoidal wave moving in the positive x direction with a wavelength of 3.14 cm the wave number K is :**

a. 3.14 rad/cm

b. 200 rad/cm

c. 314 rad/cm

d. 2 rad/cm

Moving to the next question prevents changes to this answer.

Question **5** of **10**

انتبهي هناك حظر الرجوع

| | |
|---|---|
| Timed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires. Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
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| Force Completion | This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test. |
| | This test does not allow backtracking. Changes to the answer after submission are prohibited. |

**Remaining Time:** **10 minutes, 48 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question **6** of **10**

**Question 6**

**0.5 points** Save Answer

**The speed of the waves of frequency 150 Hz and the wavelength of 3 m is :**

$v = \lambda f$

a. 450 m/s

b. 0.45 m/s

c. 50 m/s

d. 100 m/s

⚠ Moving to the next question prevents changes to this answer.

Question **6** of **10**

Multiple Attempts Not allowed. This test can only be taken once.

Force Completion This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.
This test does not allow backtracking. Changes to the answer after submission are prohibited.

**Remaining Time: 09 minutes, 32 seconds.** Less than half of the time remains.

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer. Question **7** of **10**

**Question 7** **0.5 points** Saved

1

**In standing waves the first position of the nodes equal to**

a. $x = \lambda/4$

b. $x = \lambda/2$

c. $x = 2\lambda$

d. $x = \lambda$

⚠ Moving to the next question prevents changes to this answer. Question **7** of **10**

| | |
|---|---|
| Timed Test | This test has a time limit of 20 minutes.This test will save and submit automatically when the time expires. Warnings appear when **half the time**, **5 minutes**, **1 minute**, and **30 seconds** remain. |
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**Remaining Time:** **08 minutes, 52 seconds.**

**Question Completion Status:**

⚠ Moving to the next question prevents changes to this answer.

Question **8** of **10**

**Question 8**

**0.5 points** ✓ Saved

1. **In standing waves two transverse sinusoidal waves having the same amplitude, frequency, and wavelength but traveling in opposite directions in the same medium:**

a. $y_1 = A\sin(kx+\omega t)$ *and* $y_2 = A\sin(kx+\omega t)$

b. $y_1 = A\sin(kx+\omega t)$ *and* $y_2 = A\sin(kx-\omega t+\phi)$

c. $y_1 = A\sin(kx-\omega t)$ *and* $y_2 = A\sin(kx-\omega t+\phi)$

d. $y_1 = A\sin(kx+\omega t)$ *and* $y_2 = A\sin(kx-\omega t)$

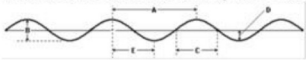
⚠ Moving to the next question prevents changes to this answer.

Question **8** of **10**

Remaining Time: **07 minutes, 09 seconds.**

Question Completion Status:

1. **What measurement is shown by line D on this wave?**



- a. distance
- b. frequency
- c. amplitude
- d. wavelength

Remaining Time: **05 minutes, 10 seconds.**

Question Completion Status:

Click **Submit** to complete this assessment.

Question **10** of **10**

**Question 10**

**0.5 points** Saved

1.

**The distance between a node and an adjacent antinode is**

a. $x = \lambda/4$

b. $x = \lambda$

c. $x = \lambda/2$

d. $x = 2\lambda$

Click **Submit** to complete this assessment.

Question **10** of **10**

Save and Submit