WebAssign
Lab #7: Modeling Spring Oscillations (Homework)

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PHYS 172-SPRING 2012, Spring 2012
Instructor: Virendra Saxena

Current Score : 12.25 / 12.25 **Due :** Tuesday, February 28 2012 11:59 PM EST

1. 3.06/3.06 points | Previous Answers

Use your 3D spring program to answer the following question. Make sure you enter the following initial conditions. Suppose the block is initially motionless at the position (0.025,0.025 ,0) m . Release the block and examine the motion of the block and select all that are correct correct.

- [x] The oscillation stays in a plane.
- [x] The z-component stays the same.
- [ ] The z-component oscillation amplitude increases.
- [ ] The x and y components do not change with time.

2. 3.06/3.06 points | Previous Answers

Change the initial conditions so that the block is initially motionless at the position (0.1,0.025 ,0.075) m . Examine the motion of the block and select all that are correct.

- [ ] The z-component oscillation amplitude increases.
- [ ] The z-component stays the same.
- [x] The oscillation stays in a plane.
- [ ] The x and y components do not change with time.

3. 3.06/3.06 points | Previous Answers

How can you change the initial conditions so that the block does not oscillate in a plane? Select all that will work.

- [x] Displace the block to the side and give the block an initial velocity in a direction out of the plane defined by the equilibrium position, the support point and this initial position (recall that three points define a plane).
- [ ] Displace the block to the side and give the block an initial velocity in a direction in the plane defined by the equilibrium position, the support point and this initial position (recall that three points define a plane).
- [ ] Start the block at the equilibrium position, but give it an initial velocity.

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4. 3.07/3.07 points | Previous Answers

Please evaluate the teamwork experience of this lab by checking off your agreement/disagreement with the following statements.

1. Our group worked effectively as a team.

- ( ) strongly disagree
- ( ) disagree
- ( ) neutral
- ( ) agree
- (•) strongly agree

2. Working as a team helped me stay focused on the problem.

- ( ) strongly disagree
- ( ) disagree
- ( ) neutral
- ( ) agree
- (•) strongly agree

3. Working as a team improved my understanding of physics.

- ○ strongly disagree
- ○ disagree
- ○ neutral
- ◉ agree
- ○ strongly agree

4. One person did most of the work on my team.

- ◉ strongly disagree
- ○ disagree
- ○ neutral
- ○ agree
- ○ strongly agree

5. Playing the different roles kept me engaged and helped me see different aspects of the problem.

- ○ strongly disagree
- ○ disagree
- ○ neutral
- ○ agree
- ◉ strongly agree

6. My team communicated well with each other.

- ○ strongly disagree
- ○ disagree
- ○ neutral
- ○ agree
- ◉ strongly agree

7. Disagreements on my team were resolved by discussion.

- ○ strongly disagree
- ○ disagree
- ○ neutral
- ◉ agree
- ○ strongly agree

These questions refer to the lab experience in general.

8. The lab is effective in teaching me important concepts of physics.

- ○ **strongly disagree**
- ○ **disagree**
- ○ **neutral**
- ○ **agree**
- ◉ **strongly agree**

9. The lab reinforces what I've learned in lecture and recitation.

- ○ strongly disagree
- ○ disagree
- ○ neutral
- ○ agree
- ◉ strongly agree

✔

10. The visualization of motion provided by Vpython is a useful tool for teaching physics.

- ○ strongly disagree
- ○ disagree
- ○ neutral
- ○ agree
- ◉ strongly agree

✔

Viewing Saved Work [Revert to Last Response]