

# Practice Test

## Introductory Physics

**HIGH SCHOOL**

---

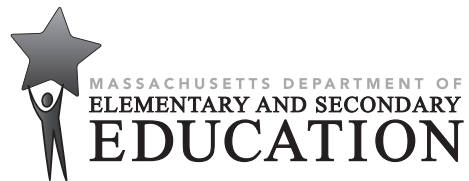
Student Name

---

School Name

---

District Name



This is a practice test. Your responses to practice test questions must be recorded on your Practice Test Answer Document.

Mark only one answer for each multiple-choice question. If you are not sure of the answer, choose the answer you think is best.

### **HOW TO ANSWER OPEN-RESPONSE QUESTIONS**

- Read all parts of each question carefully.
- Make each response as clear, complete, and accurate as you can.
- Support your responses.
- Check your answers.

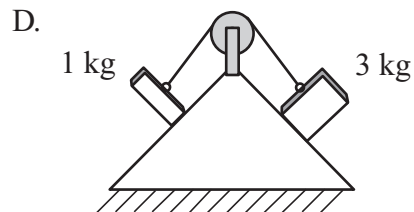
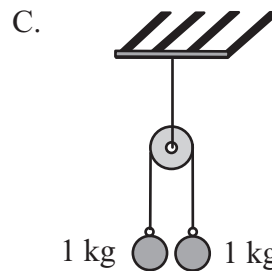
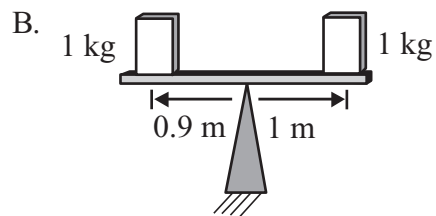
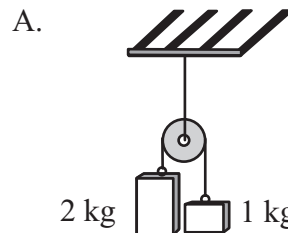
# Introductory Physics

## DIRECTIONS

This practice test contains two multiple-choice questions and one open-response question. Mark your answers to these questions in the spaces provided on page 4 of your Practice Test Answer Document.

- 1 Which of the following is a similarity between x-ray waves and sound waves?
- A. Both transfer energy.
  - B. Both travel through a vacuum.
  - C. Both have the same speed.
  - D. Both have the same frequency.

- 2 Which of the following arrangements will remain stationary unless an external force acts on it? Assume there is no friction.



# Introductory Physics

---

Question 3 is an open-response question.

- **BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.**
- **Show all your work (diagrams, tables, or computations) in your Practice Test Answer Document.**
- **If you do the work in your head, explain in writing how you did the work.**

Write your answer to question 3 in the space provided on page 4 of your Practice Test Answer Document.

- 3 A person is driving his car to a store. The store is 800 m north of the person's starting point. After traveling north 1200 m, the person realizes that he has passed the store. He turns the car around and drives back to the store. Altogether, the trip to the store takes 100 s.
- Determine the distance traveled by the car on this trip to the store. Show your calculations and include units in your answer.
  - Calculate the average speed of the car on this trip. Show your calculations and include units in your answer.
  - Determine the displacement of the car for this trip. Include units in your answer.
  - Calculate the average velocity of the car upon arrival at the store. Show your calculations and include units in your answer.

**MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM**

High School Introductory Physics

Practice Test Answer Document

<p>School Name: _____</p> <p>District Name: _____</p> <p>Last Name of Student: _____</p> <p>First Name of Student: _____</p>	<p style="text-align: center;"><b>Marking Instructions</b></p> <ul style="list-style-type: none"><li>• Use a No. 2 pencil only.</li><li>• Do not use ink, ballpoint, or felt tip pens.</li><li>• Make solid marks that fill the circles completely.</li><li>• Erase cleanly any marks you wish to change.</li><li>• Make no stray marks on this form.</li><li>• Do not fold, tear, or mutilate this form.</li></ul>
--	---



**NO TEST MATERIAL  
ON THIS PAGE**

