Practice Test

Mathematics

GRADE 8

_____

Student Name

_____

School Name

_____

District Name

MASSACHUSETTS DEPARTMENT OF
ELEMENTARY AND SECONDARY
EDUCATION
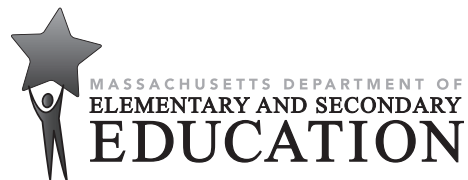
This is a practice test. Your responses to practice test questions must be recorded on your Practice Test Answer Document.

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

<div style="border:1px solid black; padding:1em;">

HOW TO ANSWER
OPEN-RESPONSE QUESTIONS

- Read all parts of each question carefully.

- Make each response as clear, complete, and accurate as you can.

- Check your answers.

</div>

Mathematics

DIRECTIONS

This practice test contains one multiple-choice question, one short-answer question, and one open-response question. Mark your answers to these questions in the spaces provided on pages 4 and 5 of your Practice Test Answer Document.

1 Which of the following inequalities is true?

A. $\sqrt{3} > \pi$

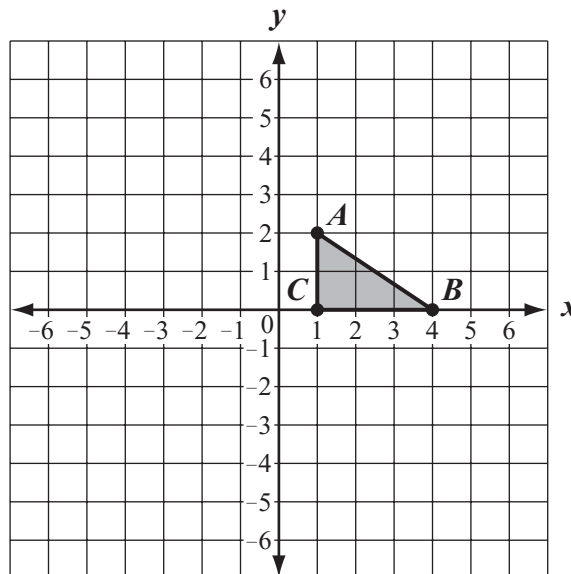B. $\sqrt{9} > \pi$

C. $\sqrt{5} > 2$

D. $\sqrt{6} > 3$

Question 2 is a short-answer question. Write your answer to this question in the box provided on page 4 of your Practice Test Answer Document. Do not write your answer on any other page. You may do your figuring on any other page.

You may use a calculator to answer this question.

2 David drew $\triangle ABC$ on a coordinate plane, as shown below.

David reflected $\triangle ABC$ over the *x*-axis. What are the coordinates of the image of point *A*?

Go On ➡

Mathematics

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 5 of your Practice Test Answer Document.

3 Lisa bought a silver chain. She wants to buy glass beads to put on the chain. The equation below can be used to determine y, Lisa's total cost, in dollars, to buy a silver chain and x glass beads.

$$y = 2x + 10$$

a. In your Practice Test Answer Document, copy the table below and complete it using the equation. Show or explain how you got each of your answers.

**Total Cost of
Silver Chain and Beads**

Number of Beads (x)	Total Cost (y)
0	$10
5	$20
10	
15	
⋮	⋮
25	
⋮	⋮
40	

b. What does the 2 in the equation represent? Explain your reasoning.

c. What does the 10 in the equation represent? Explain your reasoning.

STOP!

MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM
Grade 8 Mathematics
Practice Test Answer Document

School Name:_____

District Name: _____

Last Name of Student:_____

First Name of Student: _____

Marking Instructions
- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt-tip pens.
- Make solid marks that fill the circles completely.
- Erase cleanly any marks you wish to change.
- Do not make any stray marks on this form.
- Do not fold, tear, or damage this form.

1. Ⓐ Ⓑ Ⓒ Ⓓ

2.

DO NOT WRITE
IN SHADED AREA

3.

STOP!