

Practice Test

Mathematics

GRADE 6

Student Name

School Name

District Name



Massachusetts Department of
ELEMENTARY & 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.

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.

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 5 and 6 of your Practice Test Answer Document.

- 1 For 4 weeks, Ms. Gonzalez’s class collected canned food for a food bank.
- The class collected 16 cans during the first week.
 - During each week after the first week, the class collected 12 **more** cans than they had collected the week before.

Based on the information above, which of the following tables correctly displays the number of cans of food the class collected during each week?

A. **Cans Collected by
Ms. Gonzalez’s Class**

| Week | Number of Cans Collected during the Week |
|------|--|
| 1 | 16 |
| 2 | 12 |
| 3 | 12 |
| 4 | 12 |

C. **Cans Collected by
Ms. Gonzalez’s Class**

| Week | Number of Cans Collected during the Week |
|------|--|
| 1 | 16 |
| 2 | 12 |
| 3 | 24 |
| 4 | 36 |

B. **Cans Collected by
Ms. Gonzalez’s Class**

| Week | Number of Cans Collected during the Week |
|------|--|
| 1 | 16 |
| 2 | 28 |
| 3 | 40 |
| 4 | 52 |

D. **Cans Collected by
Ms. Gonzalez’s Class**

| Week | Number of Cans Collected during the Week |
|------|--|
| 1 | 16 |
| 2 | 32 |
| 3 | 64 |
| 4 | 128 |

Question 2 is a short-answer question. Write your answer to this question in the box provided on page 5 of your Practice Test Answer Document. Do not write your answer on any other page. You may do your figuring on any other page.

- 2** Write 84 as a product of prime numbers.

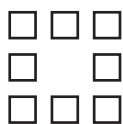
Question 3 is an open-response question.

- **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 6 of your Practice Test Answer Document.

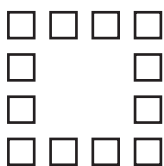
3 The first four figures in a pattern are shown below.

Figure 1



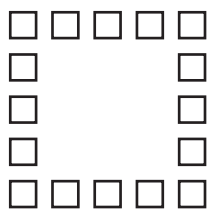
8 tiles

Figure 2



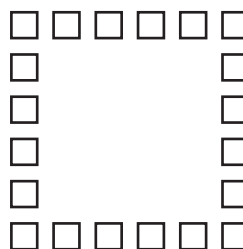
12 tiles

Figure 3



16 tiles

Figure 4



20 tiles

- Based on the pattern above, draw Figure 5.
- How many tiles will be in Figure 7?
- Using words or symbols, write an expression for determining the number of tiles in Figure n .
- If the pattern continues, which figure will contain exactly 160 tiles? Show or explain your work.

MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM

Grade 6 Mathematics

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;">Marking Instructions</p> <ul style="list-style-type: none">• 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.• Make no stray marks on this form.• Do not fold, tear, or mutilate this form. |
|--|---|

MATHEMATICS

1. (A) (B) (C) (D)

2.

DO NOT WRITE
IN SHADED AREA

Please go to the next page to answer the next question for this test. ➡

**NO TEST MATERIAL
ON THIS PAGE**

