

Let's
Practice!

SMARTER Math Review: Constructed Response Question

6TH GRADE

Common Core State Standard 6.EE.1 — Expressions and Equations

Write and evaluate numerical expressions involving whole-number exponents.

Write an expression that is equivalent to 64 using each of the following numbers and symbols once in the expression.

7

7

7

² (exponent of 2)

+

÷

()

SBAC Sample Item ID: MAT.06.CR.1.000EE.E.169

DOK Level: 2

Produced by the Southern Nevada Regional Professional Development Program (SNRPDP).
www.rpd.net

Adapted from the *Smarter Balanced Assessments: Mathematics Item/Task Specifications*,
© Copyright April 2012. Smarter Balanced Assessment Consortium. All rights reserved.



An excerpt
from a

SMARTER Math Review: Performance Task Question

6TH GRADE

Design a Garden

You are volunteering at a community center. The director of the center has asked you to design a garden and to determine the amount and cost of materials to build the garden, including wood, soil, and plants.

Part A

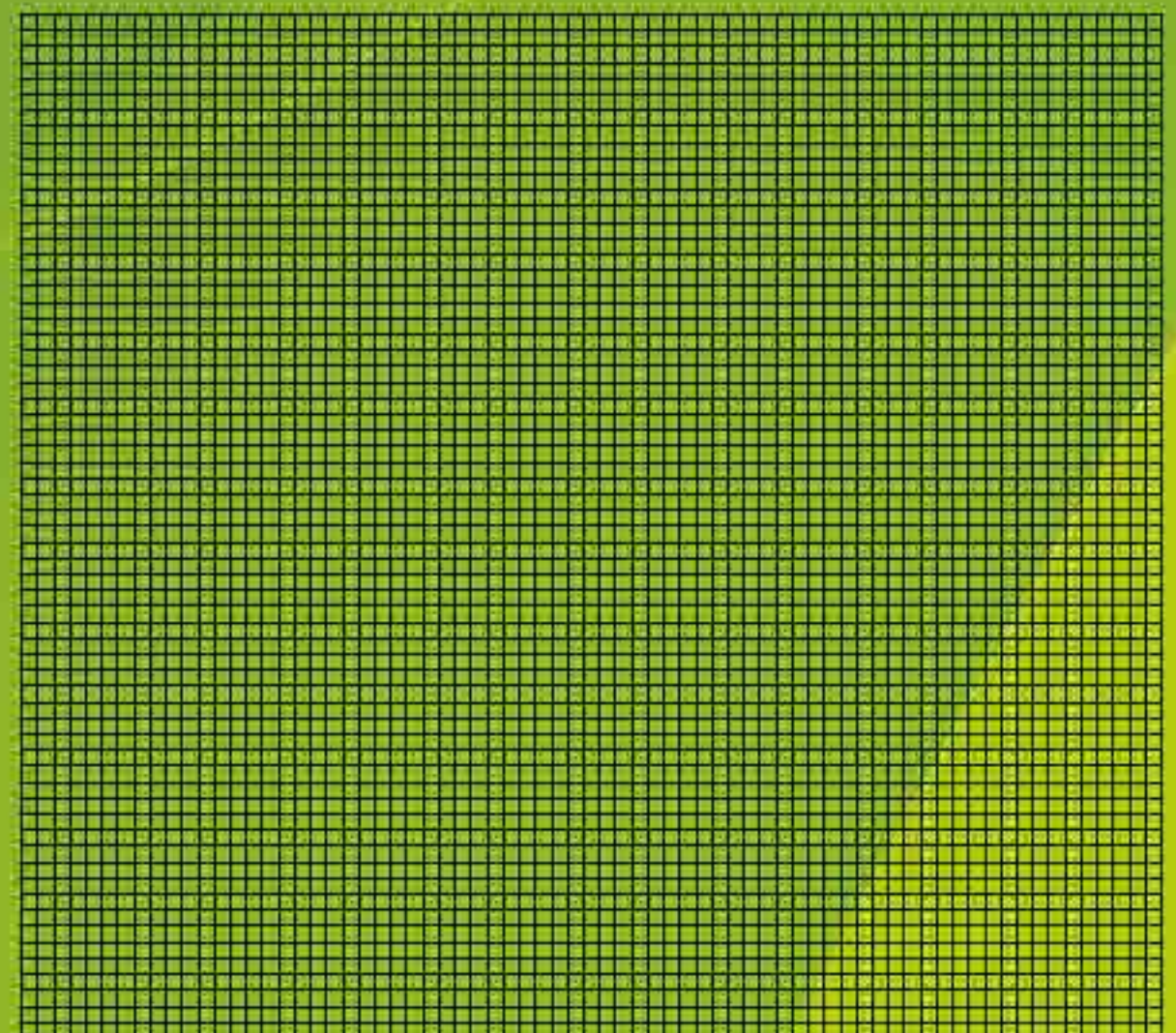
The director has asked you to design different sections of the garden that meet the following conditions:

- Section 1 must be shaped like a square.
- Section 1 must have an area between 26 square feet and 50 square feet.
- Section 2 must be shaped like a rectangle but must **not** be a square.
- Section 2 must be exactly twice the area of Section 1.

On a grid, draw your design for Section 1 and Section 2.

Be sure to label each section (1 or 2) and include the dimensions. Each box in the grid represents 1 square foot.

See your math teacher for more information about this problem.



SBAC Sample Item ID: MAT.06.PT.4.DGRDN.A.167

DOK Level: 3 (for entire task)

Produced by the Southern Nevada Regional Professional Development Program (SNRPDP).
www.rpd.net

Adapted from the *Smarter Balanced Assessments: Mathematics Item/Task Specifications*,
© Copyright April 2012. Smarter Balanced Assessment Consortium. All rights reserved.



Let's Practice!

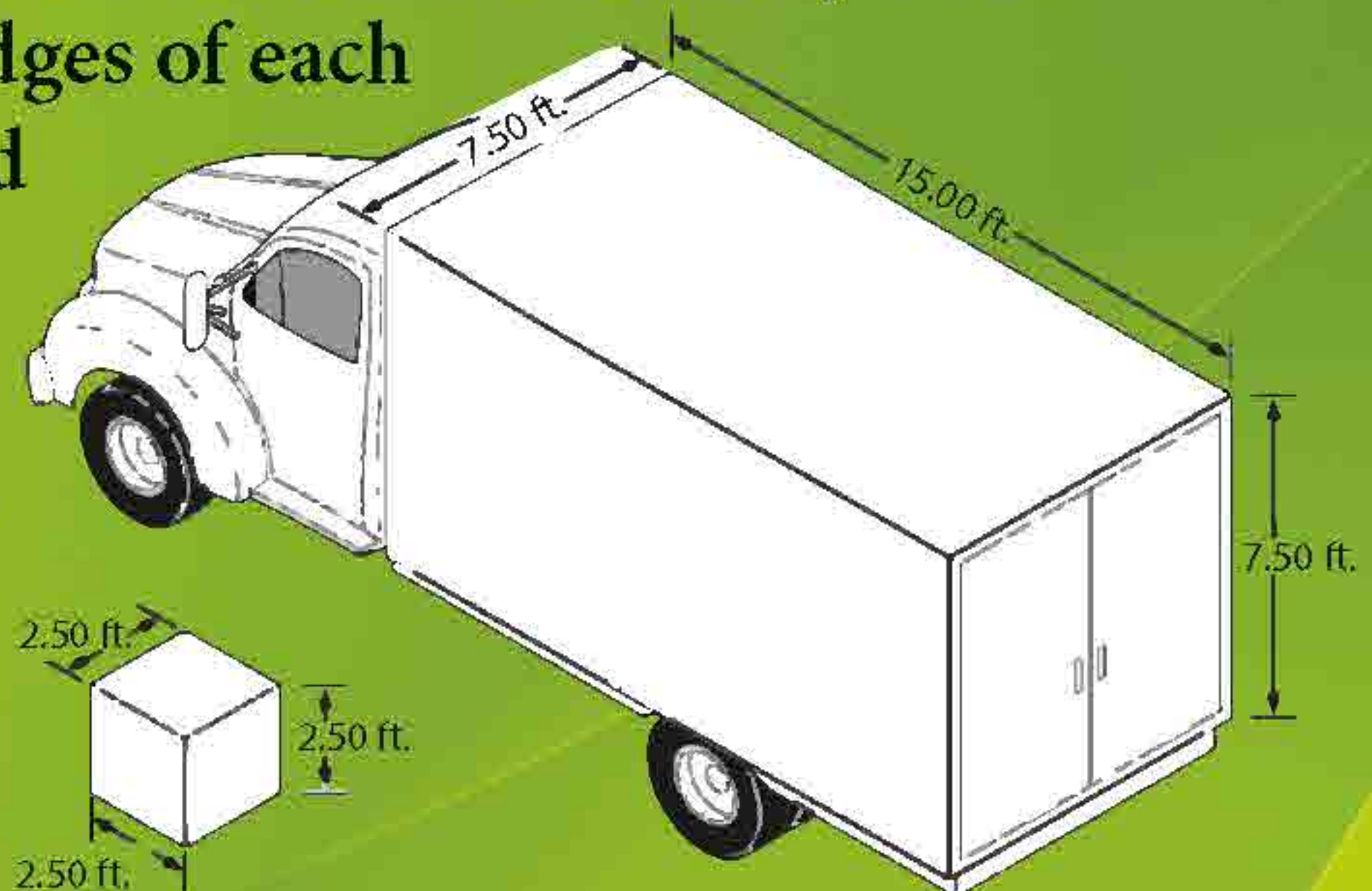
SMARTER Math Review: Extended Response Question

6TH GRADE

Common Core State Standard 6.G.2—Geometry

Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

Cube-shaped boxes will be loaded into the cargo hold of a truck. The cargo hold of the truck is in the shape of a rectangular prism. The edges of each box measure 2.50 feet and the dimensions of the cargo hold are 7.50 feet by 15.00 feet by 7.50 feet, as shown.



What is the volume, in cubic feet, of each box?

Determine the number of boxes that will completely fill the cargo hold of the truck. Use words and/or numbers to show how you determined your answer.

SBAC Sample Item ID: MAT.06.ER.3.0000G.F.175

DOK Level: 2

Produced by the Southern Nevada Regional Professional Development Program (SNRPDP).
www.rpd.net

Adapted from the *Smarter Balanced Assessments: Mathematics Item/Task Specifications*,
© Copyright April 2012. Smarter Balanced Assessment Consortium. All rights reserved.



Let's Practice!

SMARTER Math Review: Selected Response Question

6TH GRADE

Common Core State Standard 6.EE.8 — Expressions and Equations

Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

An inequality is shown.

$$x > 4$$

Select the statement(s) and number line(s) that can be represented by the inequality. Click all that apply.

- (A) The temperature increased by 4° Fahrenheit.
- (B) The value of a number substituted for x is greater than 4.
- (C) Marcus drinks more than 4 glasses of water every day.



SBAC Sample Item ID: MAT.06.SR.1.000EE.F.178

DOK Level: 1

Produced by the Southern Nevada Regional Professional Development Program (SNRPDP).
www.rpd.net

Adapted from the *Smarter Balanced Assessments: Mathematics Item/Task Specifications*,
© Copyright April 2012. Smarter Balanced Assessment Consortium. All rights reserved.



Let's Practice!

SMARTER Math Review: Technology Enhanced Question

6TH GRADE

Common Core State Standard 6.SP.4. — Statistics and Probability

Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

The ages, in years, of the 28 members of a gym class are listed.

19, 21, 22, 27, 29, 31, 31, 31, 33, 34, 37, 38, 39, 39,
39, 41, 43, 45, 46, 47, 49, 49, 51, 51, 52, 54, 56, 63

Construct a box plot of the data in the list. Click each red line in the box plot and drag it to the correct position.

Ages of Gym Class Members



SBAC Sample Item ID: MAT.06.TE.1.000SP.J.171

DOK Level: 2

Produced by the Southern Nevada Regional Professional Development Program (SNRPDP).
www.rpd.net

Adapted from the *Smarter Balanced Assessments: Mathematics Item/Task Specifications*,
© Copyright April 2012. Smarter Balanced Assessment Consortium. All rights reserved.

