engage^{ny} / **Eureka Math**

formative
learning
assessment students

Exit Tickets

EXIT TICKET

GRADE 5
MODULE 5
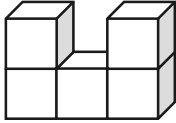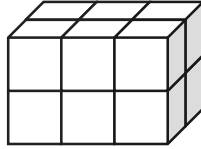
Name _____   Date _____

1. What is the volume of the figures pictured below?

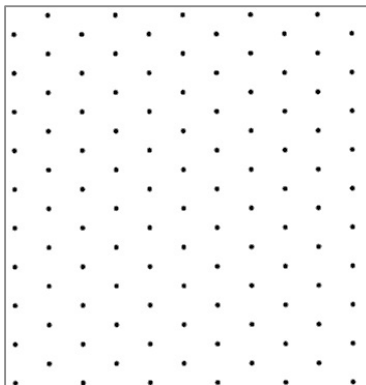   a.   b.
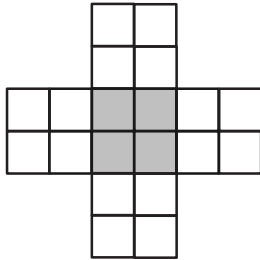
2. Draw a picture of a figure with a volume of 3 cubic units on the dot paper.

Name _____   Date _____

1. If this figure were to be folded into a box, how many cubes would fill it?

Number of cubes: _____

2. Predict how many centimeter cubes will fit in the box, and briefly explain your prediction. Use cubes to find the actual volume. (The figure is not drawn to scale.)

Prediction: _____

Actual: _____

EUREKA MATH

Lesson 2: Find the volume of a right rectangular prism by packing with cubic units and counting.

2

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015
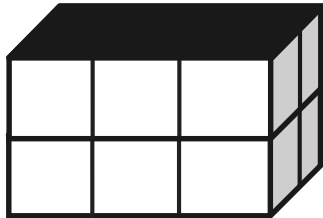
Name _____   Date _____

1. Use unit cubes to build the figure to the right, and fill in the missing information.

    Number of layers: _____

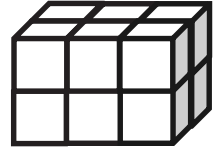   Number of cubes in each layer: _____

    Volume: _____ cubic centimeters

2. This prism measures 3 units by 4 units by 2 units. Draw the layers as indicated.

    Number of layers: 4

    Number of cubic units in each layer: 6

    Volume: _____ cubic centimeters
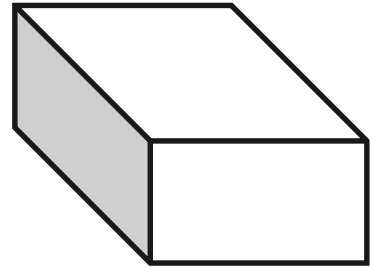
Name _____   Date _____

1. Calculate the volume of prism.
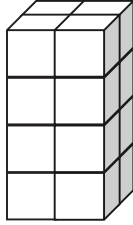
    Length: _____ mm

    Width: _____ mm

    Height: _____ mm

    Volume: _____ mm^3

    Write the multiplication sentence that shows how you calculated the volume. Be sure to include the units.

2. A rectangular prism has a top face with an area of 20 ft^2 and a height of 5 ft. What is the volume of this rectangular prism?

Name _____   Date _____

15 cm

5 cm

3 cm

250 mL ----
---- ----
200 mL ----
---- ----
150 mL ----
---- ----
100 mL ----
---- ----
50 mL ----
---- ----
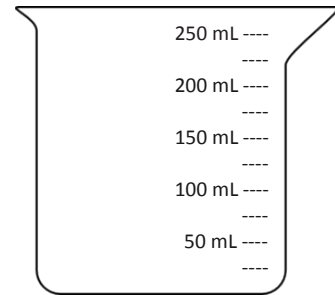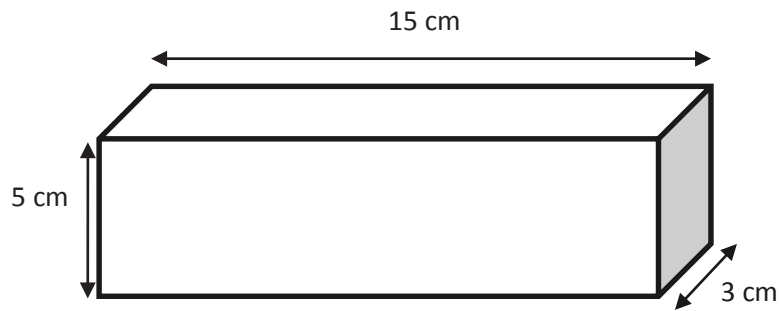
a. Find the volume of the prism.

b. Shade the beaker to show how much liquid would fill the box.

Name _____   Date _____

The image below represents three planters that are filled with soil. Find the total volume of soil in the three planters. Planter A is 14 inches by 3 inches by 4 inches. Planter B is 9 inches by 3 inches by 3 inches.
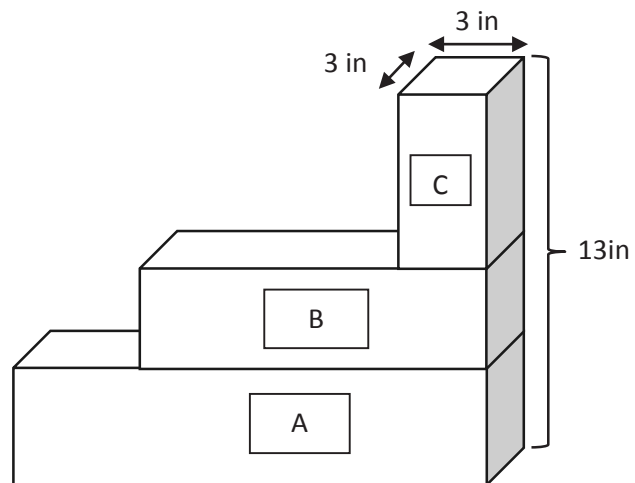
Name _____   Date _____

A storage shed is a rectangular prism and has dimensions of 6 meters by 5 meters by 12 meters. If Jean were to double these dimensions, she believes she would only double the volume. Is she correct? Explain why or why not. Include a drawing in your explanation.

Lesson 7: Solve word problems involving the volume of rectangular prisms with whole number edge lengths.

7

EUREKA MATH™

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

Sketch a rectangular prism that has a volume of 36 cubic cm. Label the dimensions of each side on the prism. Fill in the blanks that follow.

Height: _____ cm

Length: _____ cm

Width: _____ cm

Volume: _____ cubic cm

Lesson 8:   Apply concepts and formulas of volume to design a sculpture using rectangular prisms within given parameters.

8

EUREKA MATH™

Name _____   Date _____

A student designed this sculpture. Using the dimensions on the sculpture, find the dimensions of each rectangular prism. Then, calculate the volume of each prism.

a. Rectangular Prism Y

Height: _____ inches

Length: _____ inches

Width: _____ inches

Volume: _____ cubic inches

10 in

Z

6 in

18 in

Y

6 in   10 in

16 in
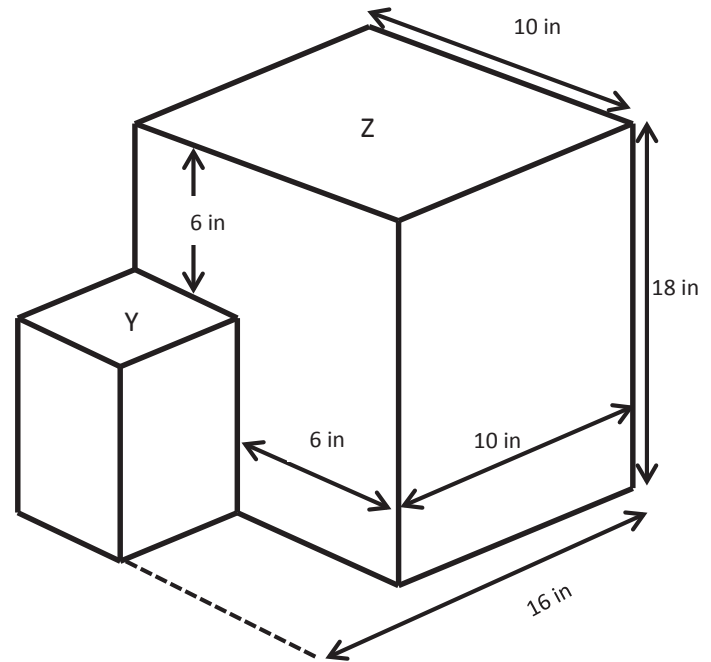
b. Rectangular Prism Z

Height: _____ inches

Length: _____ inches

Width: _____ inches

Volume: _____ cubic inches

c. Find the total volume of the sculpture. Label the answer.

EUREKA
MATH™

Lesson 9:   Apply concepts and formulas of volume to design a sculpture using
             rectangular prisms within given parameters.

9

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

Emma tiled a rectangle and then sketched her work. Fill in the missing information, and multiply to find the area.
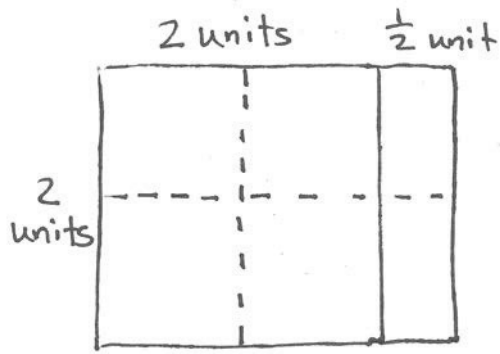
Emma's Rectangle:

_____ units long _____ units wide

Area = _____ units^2

Lesson 10:   Find the area of rectangles with whole-by-mixed and
whole-by-fractional number side lengths by tiling, record by drawing,
and relate to fraction multiplication.

10

Name _____   Date _____

To find the area, Andrea tiled a rectangle and sketched her answer. Sketch Andrea's rectangle, and find the area. Show your multiplication work.

Rectangle is

$2\frac{1}{2}$ units $\times$ $2\frac{1}{2}$ units

Area = _____

EUREKA
MATH™

Lesson 11:   Find the area of rectangles with mixed-by-mixed and fraction-by-
              fraction side lengths by tiling, record by drawing, and relate to
              fraction multiplication.

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

11

Name _____   Date _____

Measure the rectangle to the nearest $\frac{1}{4}$ inch with your ruler, and label the dimensions. Find the area.
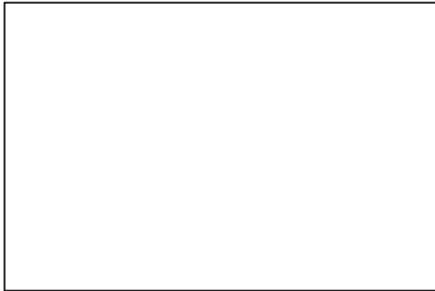
Name _____   Date _____

Find the area of the following rectangles. Draw an area model if it helps you.

1. $\frac{7}{2}$ mm $\times \frac{14}{5}$ mm

2. $5\frac{7}{8}$ km $\times \frac{18}{4}$ km

EUREKA
MATH™

Lesson 13: Multiply mixed number factors, and relate to the distributive property and the area model.

13

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

Mr. Klimek made his wife a rectangular vegetable garden. The width is $5\frac{3}{4}$ ft, and the length is $9\frac{4}{5}$ ft. What is the area of the garden?

EUREKA
MATH™

Lesson 14:   Solve real-world problems involving area of figures with fractional side
                lengths using visual models and/or equations.

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

14

Name _____   Date _____

Wheat grass is grown in planters that are $3\frac{1}{2}$ inch by $1\frac{3}{4}$ inch. If there is a 6 × 6 array of these planters with no space between them, what is the area covered by the planters?

EUREKA
MATH™

Lesson 15:   Solve real-world problems involving area of figures with fractional side lengths using visual models and/or equations.

15

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

a. Use a ruler and a set square to draw a trapezoid.

b. What attribute must be present for a quadrilateral to also be a trapezoid?

EUREKA MATH™

Lesson 16:   Draw trapezoids to clarify their attributes, and define trapezoids based
on those attributes.

16

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

1. Draw a parallelogram.

2. When is a trapezoid also called a parallelogram?

EUREKA
MATH™

Lesson 17:   Draw parallelograms to clarify their attributes, and define
parallelograms based on those attributes.

17

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

1. Draw a rhombus.

2. Draw a rectangle.

Lesson 18: Draw rectangles and rhombuses to clarify their attributes, and define rectangles and rhombuses based on those attributes.

18

EUREKA
MATH™

Name _____   Date _____

1. List the property that must be present to call a rectangle a square.

2. Excluding rhombuses and squares, explain the difference between parallelograms and kites.

EUREKA MATH

Lesson 19:   Draw kites and squares to clarify their attributes, and define kites and squares based on those attributes.

19

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015

Name _____   Date _____

Use your tools to draw a square in the space below. Then, fill in the blanks with an attribute. There is more than one answer to some of these.

a. Because a square is a kite, it must have _____.

b. Because a square is a rhombus, it must have _____.

c. Because a square is a rectangle, it must have _____.

d. Because a square is a parallelogram, it must have _____.

e. Because a square is a trapezoid, it must have _____.

f. Because a square is a quadrilateral, it must have _____.

EUREKA
MATH™

Lesson 20:   Classify two-dimensional figures in a hierarchy based on properties.

5•5

20

Name _____   Date _____

1. Use the word bank to fill in the blanks.

trapezoids   parallelograms

    All _____ are _____, but not all _____ are _____.

2. Use the word bank to fill in the blanks.

kites   rhombuses

    All _____ are _____, but not all _____ are _____.

EUREKA MATH™

Lesson 21:   Draw and identify varied two-dimensional figures from given attributes.

21

©2015 Great Minds. eureka-math.org
G5-M5-ETP-1.3.0-08.2015