Name _____ Period _____

Unit 4 Dividing Fractions Week of 2/17/20

Learning Targets from 6th Grade Common Core State Standards:

Lesson 14 Fractional Lengths with Triangles and Prisms

- ☐ I can use division and multiplication to solve problems involving areas of triangles with fractional bases and heights.
- ☐ I can explain how to find the volume of a rectangular prism using cubes that have a unit fraction as their edge length.
- ☐ I know how to find the volume of a rectangular prism even when the edge lengths are not whole numbers.

Lesson 15 Volume of Prisms

- ☐ I can solve volume problems that involve fractions.

Lesson 16 Solving problems with fractions.

- ☐ I can write equations and solve problems with fractions.

This Week's Vocabulary Words:
multiplication division quotient divisor group

Homework is due the following day.

Day	Class work—All in Spiral using iPad	Homework	Complete	Correct
Monday	No School President's Day Holiday			
Tuesday	Finish Lesson 14 Fractional Lengths for Triangles PDF p. 56	HW L15 Problems 3, 5 & 6	/4	/7
Wednesday	Lesson 15 Volume of Prisms PDF p. 67	HW L15 Problems 1, 2 & 4	/4	/6
Thursday	Lesson 16 Review and Practice	HW L16	/4	/15
Friday	Assessment Unit 4	None		
		Total	/12	
		Quality	/4	
		Total	/16	

Homework Quality—Remember, if you don't know how to complete a problem you should read it again and write down the information you have, draw a picture, or write a question you have, please do not leave blank or write "?" or idk. You can also come in and get help before school☺!

☐ Work is ***thorough*** with ***detailed*** explanations (2 pts)
☐ Homework is corrected (with additions needed) in a different color pen/pencil (2 pts)

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Tuesday Wednesday

Unit 4, Lesson 15
Practice Problems

1/7 1/6

1. A pool in the shape of a rectangular prism is being filled with water. The length and width of the pool is 24 feet and 15 feet. If the height of the water in the pool is $1\frac{1}{3}$ feet, what is the volume of the water in cubic feet?

1

2. A rectangular prism measures $2\frac{2}{5}$ inches by $3\frac{1}{5}$ inches by 2 inches.

   a. Priya said, "It takes more cubes with edge length $\frac{2}{5}$ inch than cubes with edge length $\frac{1}{5}$ inch to pack the prism." Do you agree with Priya's statement? Explain or show your reasoning.

   b. How many cubes with edge length $\frac{1}{5}$ inch fit in the prism? Show your reasoning.

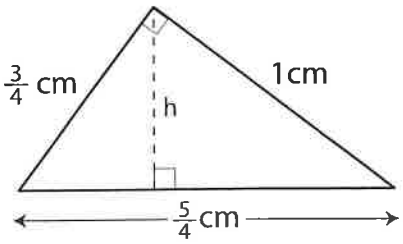
   c. Explain how you can use your answer in the previous question to find the volume of the prism in cubic inches.

1/3

3. a. Here is a right triangle. What is its area?

   b. What is the height h for the base that is $\frac{5}{4}$ units long? Show your reasoning.

1/2



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4. To give their animals essential minerals and nutrients, farmers and ranchers often have a block of salt—called "salt lick"—available for their animals to lick.

   a. A rancher is ordering a box of cube-shaped salt licks. The edge lengths of each salt lick are $\frac{5}{12}$ foot. Is the volume of one salt lick greater or less than 1 cubic foot? Explain your reasoning.

"Salt-lick 4 beentree" by Beentree via Wikimedia Commons. CC BY-SA 2.5.

   b. The box that contains the salt lick is $1\frac{1}{4}$ feet by $1\frac{2}{3}$ feet by $\frac{5}{6}$ feet. How many cubes of salt lick fit in the box? Explain or show your reasoning.

1/2

5. a. How many groups of $\frac{1}{3}$ inch are in $\frac{3}{4}$ inch?

   b. How many inches are in $1\frac{2}{5}$ groups of $1\frac{2}{3}$ inches?

1/2

6. Here is a table that shows the ratio of flour to water in an art paste. Complete the table with values in equivalent ratios.

cups of flour	cups of water
1	$\frac{1}{2}$
4	
	3
$\frac{1}{2}$	

1/3

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Unit 4, Lesson 16

Practice Problems

15

1. An orange has about $\frac{1}{4}$ cup of juice. How many oranges are needed to make $2\frac{1}{2}$ cups of juice? Select **all** equations that represent this question.

   A. $? \cdot \frac{1}{4} = 2\frac{1}{2}$

   B. $\frac{1}{4} \div 2\frac{1}{2} = ?$

   C. $? \cdot 2\frac{1}{2} = \frac{1}{4}$

   D. $2\frac{1}{2} \div \frac{1}{4} = ?$

4

2. Mai, Clare, and Tyler are hiking from a parking lot to the summit of a mountain. They pass a sign that gives distances.

   - Parking lot: $\frac{3}{4}$ mile
   - Summit: $1\frac{1}{2}$ miles

   Mai says: "We are one third of the way there." Clare says: "We have to go twice as far as we have already gone." Tyler says: "The total hike is three times as long as what we have already gone."

1

   Can they all be correct? Explain how you know.

3. Priya's cat weighs $5\frac{1}{2}$ pounds and her dog weighs $8\frac{1}{4}$ pounds. Estimate the missing number in each statement before calculating the answer. Then, compare your answer to the estimate and explain any discrepancy.

   a. The cat is _____ as heavy as the dog.

   b. Their combined weight is _____ pounds.

   c. The dog is _____ pounds heavier than the cat.

3

4. Before refrigerators existed, some people had blocks of ice delivered to their homes. A delivery wagon had a storage box in the shape of a rectangular prism that was $7\frac{1}{2}$ feet

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by 6 feet by 6 feet. The cubic ice blocks stored in the box had side lengths $1\frac{1}{2}$ feet. How many ice blocks fit in the storage box?

A. 270

B. $3\frac{3}{8}$

C. 80

D. 180

/1

5. Fill in the blanks with 0.001, 0.1, 10, or 1000 so that the value of each quotient is in the correct column. Challenge

close to $\frac{1}{100}$	close to 1	greater than 100
• ____ $\div 9$	• ____ $\div 0.12$	• ____ $\div \frac{1}{3}$
• $12 \div$ ____	• $\frac{1}{8} \div$ ____	• $700.7 \div$ ____

+3

6. A school club sold 300 shirts. 31% were sold to fifth graders, 52% were sold to sixth graders, and the rest were sold to teachers. How many shirts were sold to each group—fifth graders, sixth graders, and teachers? Explain or show your reasoning.

/3 5th 6th Teachers

7. Jada has some pennies and dimes. The ratio of Jada's pennies to dimes is 2 to 3.
   a. From the information given above, can you determine how many coins Jada has?
   b. If Jada has 55 coins, how many of each kind of coin does she have?
   c. How much are her coins worth?

/3