





Name \_\_\_\_\_

Period 1 2 4 7 8

<b>6<sup>th</sup> Grade Math Distance Learning:</b> <b>March 18-31, 2020</b>	<b>Self Assessment</b>			
	I could teach someone 	On my own 	With some hints 	Not there, YET 
Day 1: March 18 <sup>th</sup> Objective: I can find the area of a triangle.				
Day 2: March 19 <sup>th</sup> Objective: I can find the area of a parallelogram.				
Day 3: March 20 <sup>th</sup> Objective: I can describe two quantities at the same time.				
Day 4: March 24 <sup>th</sup> Objective: I can choose how to use unit rates to solve problems.				
Day 5: March 25 <sup>th</sup> Objective: I can multiply fractions and mixed numbers.				
Day 6: March 26 <sup>th</sup> Objective: I can divide fractions and mixed numbers.				
Day 7: March 27 <sup>th</sup> Objective: I can add and subtract decimals.				
Day 8: March 30 <sup>th</sup> Objective: I can use long division to divide whole numbers that result in a whole number quotient.				
Day 9: March 31 <sup>st</sup> Objective: I can multiply decimals.				
Day 10: Objective: I can find the volume of rectangular prisms.				
Day 11: Objective: I can find the mean and median of a data set.				



# Day 1 Area of Triangles

**STANDARD:** 6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

**OBJECTIVE:** I can find the area of a triangle.

**WARM UP:** Study your multiplication facts! Focus on your 5's today!

$$5 \times 1 = 5$$

$$5 \times 2 = 10$$

$$5 \times 3 = 15$$

$$5 \times 4 = 20$$

$$5 \times 5 = 25$$

$$5 \times 6 = 30$$

$$5 \times 7 = 35$$

$$5 \times 8 = 40$$

$$5 \times 9 = 45$$

$$5 \times 10 = 50$$

$$5 \times 11 = 55$$

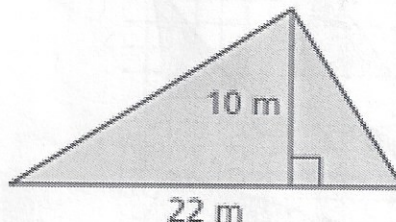
$$5 \times 12 = 60$$

## How do I find the area of a triangle? $b \times h \div 2$

Video for extra support: <https://www.youtube.com/watch?v=xCdXURXMdFY>

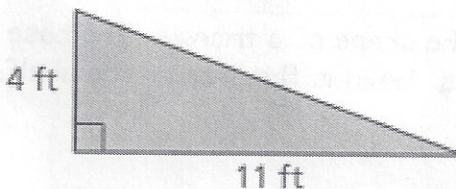
Example 1:

1. Identify the base and height  $\rightarrow b: 22 \quad h: 10$
2. Multiply the base and the height  $22 \times 10 = 220$
3. Divide by 2.  $220 \div 2 = 110$   
Area =  $110 \text{ m}^2$



Example 2:

1. Identify the base and height  $\rightarrow b: 11 \quad h: 4$
2. Multiply the base and the height  $11 \times 4 = 44$
3. Divide by 2.  $44 \div 2 = 22$   
Area =  $22 \text{ ft}^2$



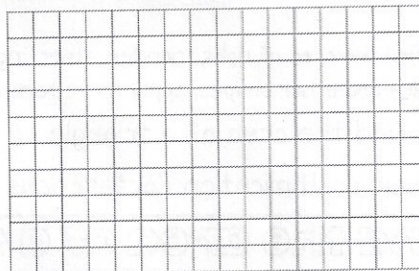
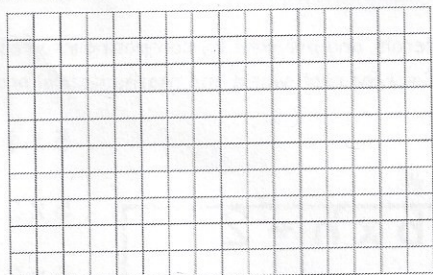
**Task 1:** First, identify the base and height of each triangle. Then, find the area.

<p>b: _____ h: _____</p> <p>Area = _____ x _____ <math>\div 2</math> = _____ (base) (height)</p>	<p>b: _____ h: _____</p> <p>Area = _____</p>	<p>b: _____ h: _____</p> <p>Area = _____</p>
<p>b: _____ h: _____</p> <p>Area = _____</p>	<p>b: _____ h: _____</p> <p>Area = _____</p>	<p>b: _____ h: _____</p> <p>Area = _____</p>

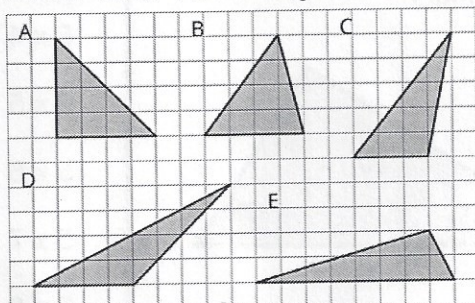


**Task 2:** Answer each question. Make sure you explain or show your reasoning.

1. Draw and label two **DIFFERENT** triangles that each have an area of 24 units<sup>2</sup>.



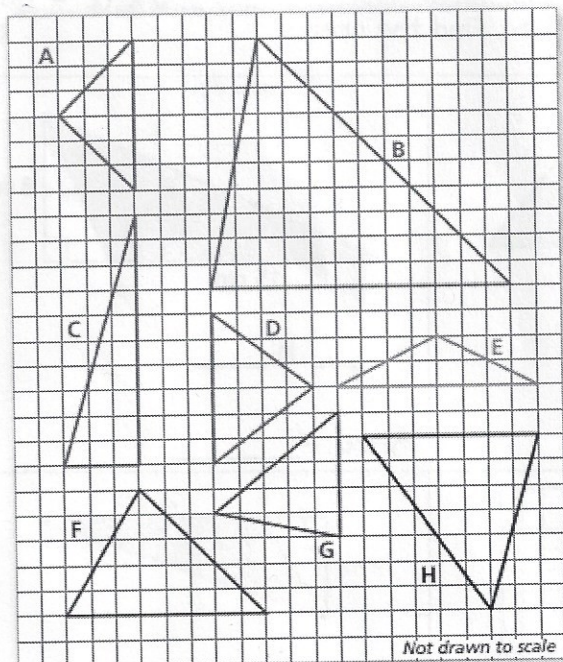
2. Select all of the triangles that have an area of 8 units<sup>2</sup>.



3. A shelf is the shape of a triangle. The base of the shelf is 36 centimeters and the height is 18 centimeters. What is the area of the shelf. (Draw a picture if you need help.)

**Task 3:** Core students choose 1 of the following. Gate students must complete both!

Option ★: Match each triangle to the area.



Area	Triangle
15 units <sup>2</sup>	
20 units <sup>2</sup>	
9 units <sup>2</sup>	
12 units <sup>2</sup>	
60 units <sup>2</sup>	
12.5 units <sup>2</sup>	
24.5 units <sup>2</sup>	
8 units <sup>2</sup>	

Option ★: Play the quiz using the code below. Make sure you use your FIRST AND LAST NAME!

**Menhenett:**

Ask participants to open  
joinmyquiz.com

and enter this code

**320191**

**Howard:**

Ask participants to open  
joinmyquiz.com

and enter this code

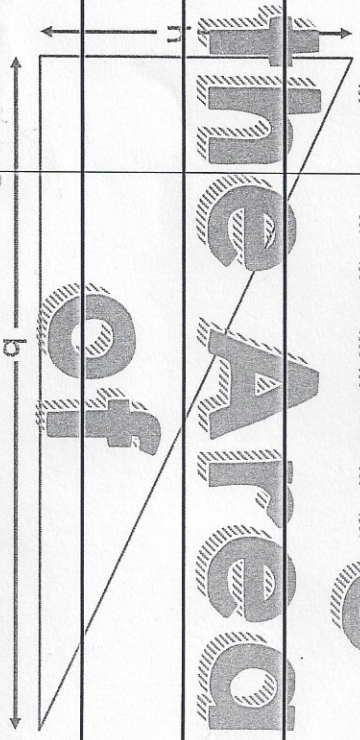
**469203**

**Task 4: Family enrichment!** (optional for extra credit)

Complete the "Order Up Area of Triangles" Activity. (Scissors and Glue required)



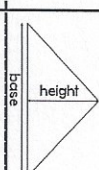

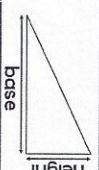
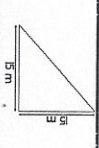
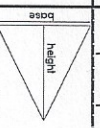






# ORDER UP!

YOU FINISHED!	
Finding	
the Area	
of	
	
Triangles	
START	

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(Student Sheet- Cut & paste for Order Up! Finding the Area of Triangles Set 1)  
Students: Cut apart each strip and complete the activity.

78 m <sup>2</sup>	<p>If the area of this triangle is 20m<sup>2</sup> and the base is 10m, what is the height? Show your work!</p> 
<b>START</b>	<p>To find the area of a _____ of use the formula <math>(b \times h) \div 2</math></p> 
112.5 m <sup>2</sup>	<p>Find the area of the following triangle if the base is 12 cm and the height is 6 cm. Show your work.</p> 
triangle	<p>Find the area of the following triangle. Remember to show your work!</p> 
40 m <sup>2</sup>	<p>Find the area of the following triangle if the base is 20cm and the height is 10cm. Show your work.</p> 
150 cm <sup>2</sup>	<p>Find the area of the following triangle. Remember to show your work!</p> 
4 m	<p><b>In Your Journal</b>            Explain why you divide the product of the base and the height in half when finding the area of a triangle. Be sure to draw a picture to help support your explanation. Be prepared to share with a partner when instructed.</p>
36 cm <sup>2</sup>	<p>Find the area of the following triangle if the base is 8m and the height is 10m. Show your work.</p> 
Write, then Share   	<b>YOU FINISHED!</b>
100 cm <sup>2</sup>	<p>Find the area of the following triangle. Remember to show your work!</p> 

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# Day 2 Area of Parallelograms

**STANDARD:** 6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

**OBJECTIVE:** I can find the area of a parallelogram

**WARM UP:** Study your multiplication facts! Focus on your 6's today!

$$6 \times 1 = 6$$

$$6 \times 2 = 12$$

$$6 \times 3 = 18$$

$$6 \times 4 = 24$$

$$6 \times 5 = 30$$

$$6 \times 6 = 36$$

$$6 \times 7 = 42$$

$$6 \times 8 = 48$$

$$6 \times 9 = 54$$

$$6 \times 10 = 60$$

$$6 \times 11 = 66$$

$$6 \times 12 = 72$$

The area  $A$  of a figure is the number of square units enclosed by the figure.

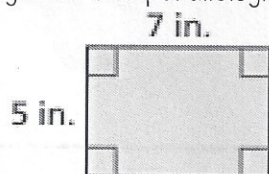
**HOW DO I FIND THE AREA OF A PARALLELOGRAM?**

1. Identify the base and the height of the parallelogram.
2. Multiply the base and height of the parallelogram.

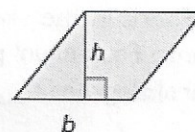
Example 1:  $A = lw$

$$= 7(5)$$

$$= 35 \text{ in.}^2$$



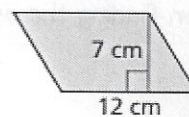
**Parallelogram**



$$A = bh$$

Example 2: Multiply the base of 12 cm X the height of 7cm.

The area of the parallelogram is 84 square cm.

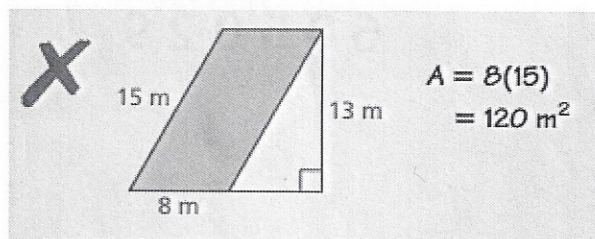


$$84 \text{ cm}^2$$

**Task 1:** Identify the measurement of the base and the height. Then, calculate the area of the parallelogram.

	BASE: _____ HEIGHT: _____ AREA: _____
	BASE: _____ HEIGHT: _____ AREA: _____
	BASE: _____ HEIGHT: _____ AREA: _____

**Task 2:** Describe and correct the error in finding the area of the parallelogram.





**Task 3:** Solve (Be sure to include the correct unit)

1. Marco's family has a garden shaped like a parallelogram. The height of the parallelogram is 7 feet and its base is 14 feet. What is the area of the garden? \_\_\_\_\_
2. Brianna won a parallelogram-shaped trophy. She knows the area of a parallelogram is 735 cm<sup>2</sup> and that its base is 35 cm. What is the trophy's height? \_\_\_\_\_
3. Maya has a piece of fabric in the shape of a parallelogram. Its height is 12 feet and its base is 18 feet. She cuts the fabric into four equal parallelograms by cutting the base and the height in half. What is the area of each new parallelogram? \_\_\_\_\_

**JOURNAL ENTRY:**

What is the difference between finding the area of a parallelogram and a triangle?

**Task 4:** Core students choose 1 of the following. Gate students must complete both!

Option ★ Complete "Parallelograms, Triangles, and Trapezoid Word Problems Create the Riddle Activity"

Option ★ Play the quiz using the code below. Make sure you use your FIRST AND LAST NAME!

**Menhenett:**

Ask participants to open  
joinmyquiz.com

and enter this code

**605029**

**Howard:**

Ask participants to open  
joinmyquiz.com

and enter this code

**392876**



# Parallelograms, Triangles and Trapezoid Word Problems

## Create the Riddle Activity

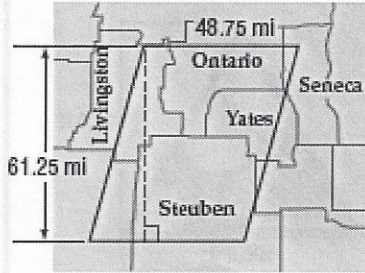


Name: \_\_\_\_\_

Find the area of the figures below to create a riddle. Then, scan the QR Code to answer the riddle.

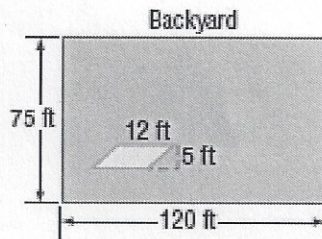
1

What is the area of the region shown on the map? Round to the nearest tenth.



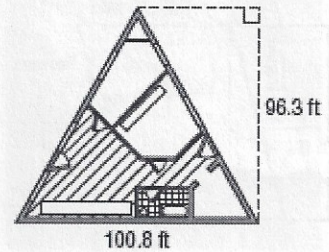
2

A family has a flower garden in the shape of a parallelogram in their backyard. They planted grass in the rest of the yard. What is the area of the backyard that is planted with grass?



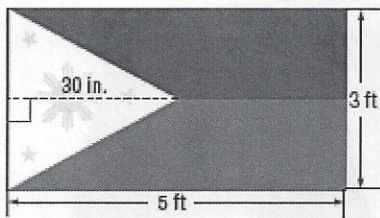
3

An architect is designing a building on a triangular plot of land. What is the cost of the building if it is \$20 per square foot? Round to the nearest dollar.



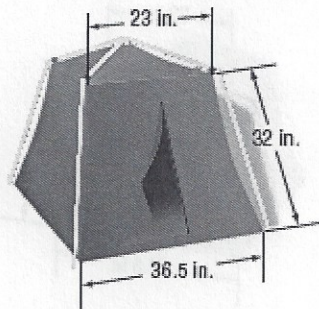
4

What is the area of the triangle on the flag of the Philippines in inches? Be sure to check the dimensions ...



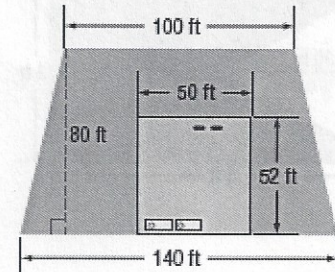
5

A play tent is shown. How much fabric was used to make the front and back of the play tent? Be careful ...



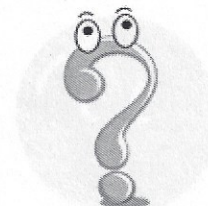
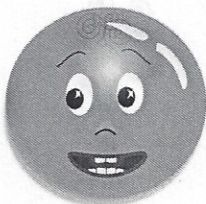
6

The diagram shows the lawn that surrounds an office building. If one bag of grass seed covers 2,000 square feet, how many bags are needed to seed the lawn?



1,904 in <sup>2</sup> : bed	4 bags: disguise	4,470 ft <sup>2</sup> : will	540 in <sup>2</sup> : wear
\$194,141: what	2,985.9 mi <sup>2</sup> : the	952 in <sup>2</sup> : pillow	2,895.9 mi <sup>2</sup> : can
8,940 ft <sup>2</sup> : did	5 bags: cape	\$97,070: why	45 in <sup>2</sup> : carry

3 2 1 5 4 a 6 ?





# Day 3 Ratios

**STANDARD:** 6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."

**OBJECTIVE:** I can describe 2 quantities at the same time.

**WARM UP:** Study your multiplication facts! Focus on your 7's today!

$$7 \times 1 = 7$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$7 \times 8 = 56$$

$$7 \times 9 = 63$$

$$7 \times 10 = 70$$

$$7 \times 11 = 77$$

$$7 \times 12 = 84$$

## Ratio

**Words** A ratio is a comparison of two quantities. Ratios can be part-to-part, part-to-whole, or whole-to-part comparisons.

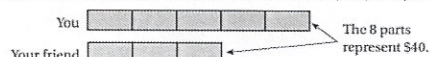
**Examples** 2 red crayons to 6 blue crayons  
1 red crayon for every 3 blue crayons  
3 blue crayons per 1 red crayon  
3 blue crayons for each red crayon  
3 blue crayons out of every 4 crayons  
2 red crayons out of 8 crayons

**Algebra** The ratio of  $a$  to  $b$  can be written as  $a:b$ .



The ratio of your monthly allowance to your friend's monthly allowance is 5:3. The monthly allowances total \$40. How much is each allowance?

To help visualize the problem, express the ratio 5:3 using a tape diagram.



Because there are 8 parts, you know that 1 part represents  $\$40 \div 8 = \$5$ .

5 parts represent  $\$5 \cdot 5 = \$25$ .

3 parts represent  $\$5 \cdot 3 = \$15$ .

So, your monthly allowance is \$25, and your friend's monthly allowance is \$15.

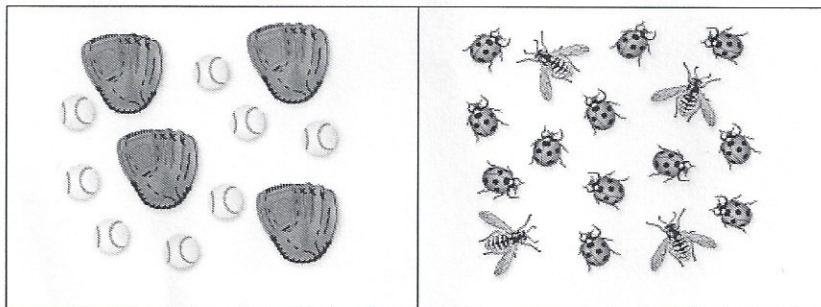
You mix 3 pints of yellow paint for every 4 pints of blue paint to make green paint. You use 10 pints of blue paint. How much green paint do you make?

The ratio of yellow paint to blue paint is 3 to 4. Use a ratio table to find an equivalent ratio with 10 parts blue paint.

		$\div 2$	$\times 5$	
Yellow (pints)	3	$\frac{3}{2}$	$7\frac{1}{2}$	
Blue (pints)	4	2	10	
		$\times 2$	$\div 5$	

You use  $7\frac{1}{2}$  pints of yellow paint and 10 pints of blue paint.

**Task 1:** Write 3 ratios that describe each situation. Determine if the ratio is a part:part or a part:whole comparison.



**Task 2:** Find the missing values in each ratio table.

Boys	1	
Girls	5	10

Violins	8	24
Cellos	3	

Taxis	6		36
Buses	5	15	

Burgers	3		9
Hot Dogs	5	10	

Towels	14	7	
Blankets	8		16

Forks	16	8	
Spoons	10		30

**Task 3:** Complete the Ratios and Proportions Menu Choice Board



# RATIOS & PROPORTIONS

## Menu Choice board

Name: \_\_\_\_\_

due date: \_\_\_\_\_

Choose activities from the project menu below that equal \$10 or more.  
Shade in each box to show which activities you completed.

Standards	Appetizers \$1	Entrées \$5	Desserts \$3	Project Proposal
6.RP.A.1 I understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	<b>Spinning Ratios</b> Create a spinner that is divided into six different colored sections. Spin the spinner using a paperclip and pencil twenty times and record the results. Write ten different ratios using the data you collected.	<b>Zoo Map</b> Your math class has decided to go to the zoo to learn about ratios. Draw a map of the zoo and include at least ten different animal exhibits. For each exhibit, draw the number of animals that live there. Write twenty different ratios comparing the animals from your map (i.e. 4 : 3 = There are 4 elephants to every 3 lions).	<b>Ratios All Around Us</b> Use your knowledge of ratios to construct 20 different ratios based on things around you (boys to girls, crayons to colored pencils, iPhones to Android, etc.). For each ratio, write a statement describing the relationship between the two quantities (i.e. For every three boys, there are four girls).	Not interested in doing any of the projects here? Create your own project using the project proposal form and present it to your teacher. Once your project is approved, your teacher will determine how many points your project is worth.
6.RP.A.2 I understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship.	<b>Exit Card</b> Create a five problem exit card where students have to show that they understand the relationship between unit rate and ratios. Don't forget to include a key.	<b>Retail or Bulk</b> You love getting the best deal possible. Look up the prices of 15 food items from a retail store (Smiths, Albertsons, Kroger, etc.) and a bulk supplier (Sam's Club, Costco, etc.). Calculate and write a ratio for each unit price in order to determine where you should shop for each item. Create a visual to showcase your findings (i.e. Prezi, PowerPoint, poster, chart, etc.).	<b>Gas Mileage Chart</b> You are buying a car and want to get the best gas mileage possible. Find ten cars that you would like to purchase and record the gas mileage for city and highway miles for each. Then calculate the cost of gas for an entire month. Which car has the best city gas mileage and which car has the best highway gas mileage? Which car overall should you purchase?	
6.RP.A.3 I can use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	<b>Foldable</b> Create a foldable teaching others the different strategies to solve real-world ratio and rate reasoning problems (i.e. tape diagram, double number line diagram, equation, table). Include step by step directions and a visual model or example for each strategy.	<b>Restaurant Recipes</b> You just purchased a restaurant and want to use you granny's old recipes. Find five different recipes that you love and scale up each by a factor of nine to feed your hungry customers. Use a table to record your conversions and show that your ratios are equivalent for each ingredient.	<b>Ratio Rummy</b> Construct a 36 card deck of different ratios (make sure that each ratio is equivalent to at least one other ratio). The goal of the game is match as many sets of equivalent ratios as possible. Play the game with a friend and write an equation for each set of equivalent ratios played.	



# Day 4 Unit Rate

**STANDARD:** 6.RP.A.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

**OBJECTIVE:** I can choose how to use unit rates to solve problems.

**WARM UP:** Study Multiplication Facts. Focus on 8's today!

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

$$8 \times 11 = 88$$

$$8 \times 12 = 96$$

## Extra help:

<https://www.youtube.com/watch?v=RQ2nYUBVvqI>

**Example 1:** **Words** A **unit rate** compares a quantity to one unit of the other quantity.

**Numbers**

$$\text{Rate: } \frac{\$27}{3 \text{ pizzas}}$$



$$\text{Unit rate: } \frac{\$9}{1 \text{ pizza}}$$

**Example 2:** In a jalapeño pepper-eating contest, a contestant eats 70 peppers in 3 minutes. Write a rate that represents this situation.

$$\text{rate} = \frac{70 \text{ peppers}}{3 \text{ minutes}}$$

A rate is  $\frac{70 \text{ peppers}}{3 \text{ minutes}}$

## On Your Own

1. A contestant eats 55 peppers in 4 minutes. Write a rate that represents this situation.

**Example 3:** Which bag of dog food is the better buy? Explain.



20-pound bag

$$\frac{\$17.20}{20 \text{ pounds}} = \frac{\$0.86}{1 \text{ pound}}$$

40-pound bag

$$\frac{\$33.60}{40 \text{ pounds}} = \frac{\$0.84}{1 \text{ pound}}$$

Because \$0.84 is less than \$0.86, the 40-pound bag is the better buy.



**Task 1**

Identify the question that is different.  
Solve "both" answers.



What is the cost per bagel?

What is the unit cost of a bagel?

What is the cost per dozen bagels?

How much does each bagel cost?

**Task 2**

Find the unit rate for each situation.

\$28 saved in 4 weeks \_\_\_\_\_ in 1 week

270 miles in 6 hours \_\_\_\_\_ in 1 hour

2520 kilobytes in 18 seconds \_\_\_\_\_ in 1 second

1080 miles on 15 gallons \_\_\_\_\_ in 1 gallon

**LIGHTNING** Lightning strikes Earth 100 times per second. What is the rate, in strikes per minute?

**Task 3**

1. Bryan's mom spent \$46.20 filling up her gas tank. If her gas tank can hold 12 gallons of gas, how much did each gallon cost?

\_\_\_\_\_ per gallon

2. Morgan ran 5 miles in 57 and a half minutes. How long did it take her to run each mile?

\_\_\_\_\_ minutes per mile

3. Mrs. Howard bought 6 books for \$53.94. How much did each book cost?

\_\_\_\_\_ per book

**Task 4** Complete the "Let's Go Shopping" Activity



Name: \_\_\_\_\_ #: \_\_\_\_\_

Date: \_\_\_\_\_ HR: \_\_\_\_\_



## Let's go shopping!


**Directions:** With your team, and in the given time, walk around the room and compare the 2 advertised prices. Determine which the better buy is. Show all math work below.

Item	Math Work
McDonald's Chicken Nuggets	
Apples	
Colored Pencil	



Cookies	
Donuts	
Juice	





1 dozen donuts for \$12.00

10 donuts for \$13.00



4 nuggets for \$16.00

6 nuggets for \$30.00



**Cookies**

Chip Ahoy: 7 cookies for \$42.00

Famous Amos: 8 cookies for \$56.00

**Apples**

G-Town: 12 apples for \$24.00

Key Food: 6 apples for \$18.00

**Colored Pencils**

Grayola: 9 for \$36.00

Prisma Color: 6 for \$18.00

**Orange Juice**

Minute Maid: 4 juices for \$20.00

Tropicana: 6 juices for \$24.00





# Day 5 Multiplying Fractions

**STANDARD:** 5.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

**OBJECTIVE:** I can multiply fractions and mixed numbers.

**WARM UP:** Practice Multiplication Quiz (5–8). Time yourself for 1 minute and see how many you can answer.

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 0 \\ \times 0 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 0 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 0 \\ \times 4 \\ \hline \end{array}$$

## HOW DO YOU MULTIPLY FRACTIONS?

1. Make sure all numbers are written as fractions.  
–All whole numbers  
–Mixed numbers turned into improper fractions
2. Multiply the numerators
3. Multiply the denominators
4. Simplify the product, if needed.

### Key Concept and Vocabulary

Multiply numerators.

$$\frac{1}{3} \cdot \frac{2}{5} = \frac{1 \cdot 2}{3 \cdot 5} = \frac{2}{15}$$

Multiply denominators.

Multiply fractions.



**Example 2** Find  $5\frac{1}{2} \cdot \frac{3}{4}$ .

$$5\frac{1}{2} \cdot \frac{3}{4} = \frac{11}{2} \cdot \frac{3}{4}$$

$$= \frac{11 \cdot 3}{2 \cdot 4}$$

$$= \frac{33}{8}, \text{ or } 4\frac{1}{8}$$

Rewrite  $5\frac{1}{2}$  as  $\frac{11}{2}$ .

Multiply the numerators.

Multiply the denominators.

Simplify.



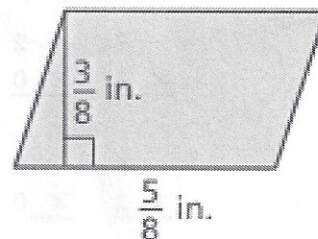
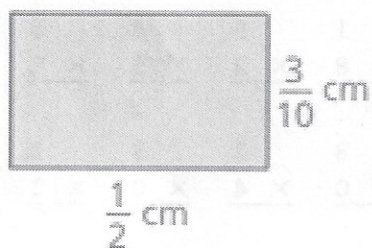
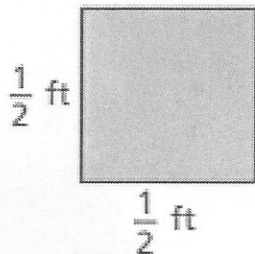
**Task 1:** Find the product.

a.  $2\frac{1}{2} \times 3\frac{1}{3}$

b.  $\frac{4}{9} \times 2\frac{1}{4}$

c.  $3\frac{1}{4} \times 1\frac{1}{2}$

**Task 2:** Find the area of the rectangles and parallelograms.



**Task 3:** Answer each question in the second column.

Problem	Response (Show Work)
Kaylee and her mom went to the craft store to buy supplies to make a costume for Kaylee's school play. They needed $3\frac{1}{2}$ yards of gold fabric. If each yard costs \$4, how much will $3\frac{1}{2}$ yards cost?	
They also needed ribbon for the costume. Each spool of ribbon is $10\frac{2}{5}$ yards long. If they buy 3 spools, how many yards of ribbon will they have?	
They had to get 2 packages of buttons for the costume. Each package of buttons weighs $5\frac{1}{3}$ ounces. What is the total weight of the 2 packages of buttons?	

**Task 4:** Choose 1 of the following options.

Option **1**: Play "Super Six" Multiplying Fractions Game

\*Parent signature on game board required for credit\*

Option **2**: Multiplying Fractions Color by Code



Name: \_\_\_\_\_

## Multiplying Fractions Color by Code

Complete each multiplication problem. Color each snail according to the code below.

If the answer equals exactly  $\frac{1}{2}$ , color the snail yellow.

If the answer is more than half, color the snail blue.

If the answer is less than half, color the snail green.

1.  $\frac{1}{2} \times \frac{1}{4} =$  \_\_\_\_\_



2.  $\frac{1}{2} \times \frac{4}{5} =$  \_\_\_\_\_



3.  $\frac{4}{5} \times \frac{3}{4} =$  \_\_\_\_\_



4.  $\frac{3}{4} \times \frac{3}{4} =$  \_\_\_\_\_



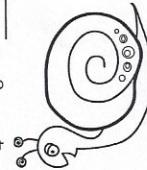
5.  $\frac{2}{5} \times \frac{1}{4} =$  \_\_\_\_\_



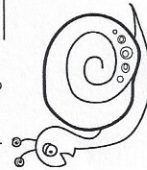
6.  $\frac{5}{6} \times \frac{2}{3} =$  \_\_\_\_\_



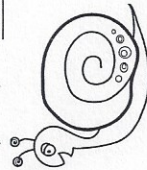
7.  $\frac{3}{4} \times \frac{1}{3} =$  \_\_\_\_\_



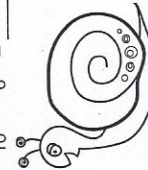
8.  $\frac{3}{4} \times \frac{2}{3} =$  \_\_\_\_\_



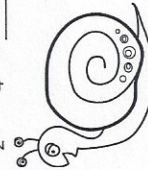
9.  $\frac{2}{4} \times \frac{1}{3} =$  \_\_\_\_\_



10.  $\frac{9}{10} \times \frac{5}{6} =$  \_\_\_\_\_



11.  $\frac{1}{2} \times \frac{2}{4} =$  \_\_\_\_\_



12.  $\frac{6}{7} \times \frac{4}{6} =$  \_\_\_\_\_



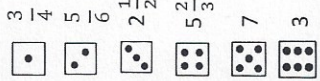
© Hello Learning

# Super Six!

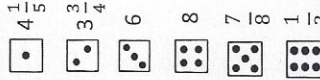
A Multiplying Fractions Game

$\frac{1}{4}$	34	$\frac{5}{18}$	6	$4\frac{23}{24}$	$\frac{35}{48}$
$29\frac{2}{5}$	$2\frac{13}{16}$	56	$9\frac{3}{8}$	$21\frac{1}{4}$	$4\frac{1}{2}$
20	$11\frac{1}{4}$	$6\frac{1}{8}$	$3\frac{1}{8}$	$2\frac{1}{3}$	42
$\frac{21}{32}$	24	$10\frac{1}{2}$	1	$2\frac{5}{8}$	5
$23\frac{4}{5}$	$45\frac{1}{3}$	$2\frac{3}{16}$	$3\frac{3}{20}$	$\frac{5}{6}$	$1\frac{8}{9}$
18	$3\frac{1}{2}$	15	$26\frac{1}{4}$	$12\frac{3}{5}$	$6\frac{2}{3}$

Roll 1



Roll 2



How to Play

Player 1 is blue and Player 2 is red.  
Player 1 rolls the dice. Player 1 matches up the dice with the corresponding numbers.  
Make sure to use one number from the Roll 1 Group and one number from the Roll 2 group. Then find the product of both numbers. Player 2 will complete the same problem in order to check Player 1's work.  
If Player 1 is correct, then he or she will find the answer and color it in. Player 2 will repeat the process by rolling the dice and finding the product of the two numbers. Player 1 will also complete the problem to check Player 2's work. The first player to get 6 in a row is the winner.

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# Day 6 Dividing Fractions

**STANDARD:** 6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.

**OBJECTIVE:** I can divide fractions.

**WARM UP:** Study your multiplication facts! Focus on your 9's today

**HOW DO I divide Fractions?** → Multiply by the reciprocal.

Video for extra support → <https://youtu.be/4lkq3DgvmJo>

Example 1:

## Dividing Fractions

**Words** To divide a number by a fraction, multiply the number by the reciprocal of the fraction.

**Numbers**  $\frac{1}{5} \div \frac{3}{4} = \frac{1}{5} \times \frac{4}{3}$

Example 2:

Find  $\frac{1}{6} \div \frac{2}{3}$ .

$$\begin{aligned} \frac{1}{6} \div \frac{2}{3} &= \frac{1}{6} \times \frac{3}{2} \\ &= \frac{1 \times 3}{6 \times 2} \\ &= \frac{3}{12} \\ &= \frac{1}{4} \end{aligned}$$

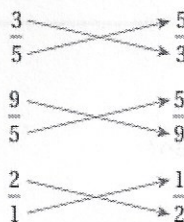
Multiply by the reciprocal of  $\frac{2}{3}$ , which is  $\frac{3}{2}$ .

Multiply fractions. Divide out the common factor 3.

Simplify.

What is a  
reciprocal?

Fraction Reciprocal



$$9 \times 1 = 9$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$

$$9 \times 11 = 99$$

$$9 \times 12 = 108$$

**Task 1:** Find the quotient.

$$\frac{1}{8} \div \frac{1}{4}$$

$$\frac{3}{7} \div 6$$

$$\frac{1}{3} \div \frac{1}{9}$$

$$\frac{5}{6} \div \frac{2}{7}$$

$$\frac{12}{25} \div 4$$

$$\frac{7}{10} \div \frac{3}{8}$$

**MATCHING** Match the expression with its value.

3.  $\frac{2}{5} \div \frac{8}{15}$

4.  $\frac{8}{15} \div \frac{2}{5}$

5.  $\frac{2}{15} \div \frac{8}{5}$

6.  $\frac{8}{5} \div \frac{2}{15}$

A.  $\frac{1}{12}$

B.  $\frac{3}{4}$

C. 12

D.  $1\frac{1}{3}$



**How do I divide mixed numbers?** → Convert to improper fractions and multiply by the reciprocal.

### Key Concept and Vocabulary

Rewrite as improper fractions.

$$\begin{aligned} 2\frac{1}{2} \div 5 &= \frac{5}{2} \div \frac{5}{1} \\ &= \frac{5}{2} \times \frac{1}{5} \\ &= \frac{1}{2} \end{aligned}$$



### Skill Examples

$$1. \ 5 \div 2\frac{1}{2} = \frac{5}{1} \div \frac{5}{2} = \frac{5}{1} \times \frac{2}{5} = 2$$

$$2. \ 3\frac{3}{4} \div 2\frac{1}{2} = \frac{15}{4} \div \frac{5}{2} = \frac{15}{4} \times \frac{2}{5} = \frac{3}{2} = 1\frac{1}{2}$$

$$3. \ 4\frac{1}{6} \div 1\frac{2}{3} = \frac{25}{6} \div \frac{5}{3} = \frac{25}{6} \times \frac{3}{5} = \frac{5}{2} = 2\frac{1}{2}$$

$$4. \ 7\frac{1}{3} \div 11 = \frac{22}{3} \div \frac{11}{1} = \frac{22}{3} \times \frac{1}{11} = \frac{2}{3}$$

**Task 3:** find the quotient.

$$4\frac{1}{2} \div 9 =$$

$$8 \div 1\frac{1}{3} =$$

$$5\frac{1}{2} \div \frac{1}{2} =$$

$$3\frac{3}{7} \div 8 =$$

$$32 \div 3\frac{1}{5} =$$

$$\frac{1}{2} \div 1\frac{1}{2} =$$

**Task 4:** Choose 1 of the following options.

Option ★ Play "Super Six" Dividing Fractions Game

\*Parent signature on game board required for credit\*

Option ★ Play the quiz using the code below. Make sure you use your FIRST AND LAST NAME!

**Menhenett:**

Ask participants to open  
joinmyquiz.com

and enter this code

**6 2 8 1 4 6**

**Howard:**

Ask participants to open  
joinmyquiz.com

and enter this code

**0 4 3 3 2 2**









# Super Six!







A Dividing Fractions Game

$\frac{1}{5}$	$\frac{7}{8}$	$\frac{5}{28}$	$\frac{5}{7}$	$6\frac{10}{21}$	$\frac{3}{32}$
$\frac{2}{9}$	$\frac{20}{21}$	$\frac{4}{5}$	$\frac{17}{24}$	$\frac{25}{126}$	$\frac{17}{18}$
8	$2\frac{1}{4}$	$7\frac{1}{2}$	$\frac{1}{8}$	$2\frac{1}{2}$	21
$\frac{5}{48}$	$3\frac{3}{7}$	$\frac{25}{42}$	$\frac{1}{2}$	$2\frac{6}{7}$	9
$1\frac{13}{15}$	$1\frac{22}{63}$	$\frac{5}{16}$	$\frac{5}{12}$	$\frac{6}{7}$	$1\frac{1}{6}$
$\frac{3}{8}$	$\frac{2}{3}$	17	$1\frac{2}{3}$	$\frac{5}{36}$	$1\frac{23}{45}$

## Roll 1

	$\frac{3}{4}$
	$\frac{5}{6}$
	$2\frac{1}{2}$
	$5\frac{2}{3}$
	7
	3

## Roll 2

	$4\frac{1}{5}$
	$3\frac{3}{4}$
	6
	8
	$\frac{7}{8}$
	$\frac{1}{3}$

## How to Play

Player 1 is blue and Player 2 is red. Player 1 rolls the dice. Player 1 matches up the dice with the corresponding numbers. Make sure to use one number from the Roll 1 Group and one number from the Roll 2 group. Roll 1 is divided by Roll 2 (Roll 1 ÷ Roll 2). Player 2 will complete the same problem in order to check Player 1's work. If Player 1 is correct, then he or she will find the quotient and color it in. Player 2 will repeat the process by rolling the dice and finding the quotient of the two numbers. Player 1 will also complete the problem to check Player 2's work. The first player to get 6 in a row is the winner.



# Day 7 Adding and Subtracting Decimals

**STANDARD:** 6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation

**OBJECTIVE:** I can add and subtract decimals.

**WARM UP:** Study your multiplication facts! Focus on your 10s today!

$$10 \times 1 = 10$$

$$10 \times 2 = 20$$

$$10 \times 3 = 30$$

$$10 \times 4 = 40$$

$$10 \times 5 = 50$$

$$10 \times 6 = 60$$

$$10 \times 7 = 70$$

$$10 \times 8 = 80$$

$$10 \times 9 = 90$$

$$10 \times 10 = 100$$

$$10 \times 11 = 110$$

$$10 \times 12 = 120$$

How do you add and subtract decimals?

Line up the decimal points

Video for extra support → <https://youtu.be/kwh4SD1ToFc>

## Key Concept and Vocabulary

$$\begin{array}{r} 5.7 \\ + 3.36 \\ \hline 9.06 \end{array}$$

Align on decimal point.

$$\begin{array}{r} 12.72 \\ - 3.84 \\ \hline 8.88 \end{array}$$

Adding and Subtracting



**Task 1:** Find the sum or difference.

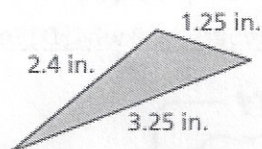
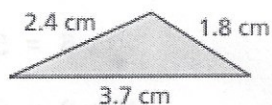
4.75 + 3.56	5.7 - 4.81
112.5 + 24.5	20.7 - 1.24
2.4 + 2.04	3.4 + 5.6 - 2.3



**Task 2:** Answer each question. Be sure to explain or show your reasoning.

1. You take \$20 to the store. You buy a magazine for \$3.65 and a birthday card for \$5.29. How much money do you have left?

2. What is the perimeter of each triangle?



**Task 4:** Core students choose 1 of the following. Gate students must complete both!

Option ★ Complete "Decimals Maze Activity"

Option ★: Play the quizizz using the code below. Make sure you use your FIRST AND LAST NAME!

**Menhenett:**

Ask participants to open  
[joinmyquiz.com](https://joinmyquiz.com)

and enter this code

**700294**

**Howard:**

Ask participants to open  
[joinmyquiz.com](https://joinmyquiz.com)

and enter this code

**165874**

**Task 4: Family enrichment!** (optional for extra credit)

Play "Race to the Finish" Adding and Subtracting Decimals Game.

To receive extra credit, parent must sign game board.





# RACE TO THE FINISH

ADDING AND SUBTRACTING DECIMALS



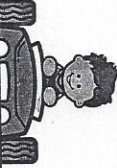
<b>START</b>				
4.57	1.87	6.2	8.04	
=3.21	+5.90	=4.29	+9.32	



<b>1st SCORING</b>				
0.76	5.6	9.02	4.76	
=0.32	+4.30	=2.45	+1.89	

Solve a problem created by your partner				
5.78	0.32	8.03	0.95	
=4.50	+7.31	=2.61	+0.05	

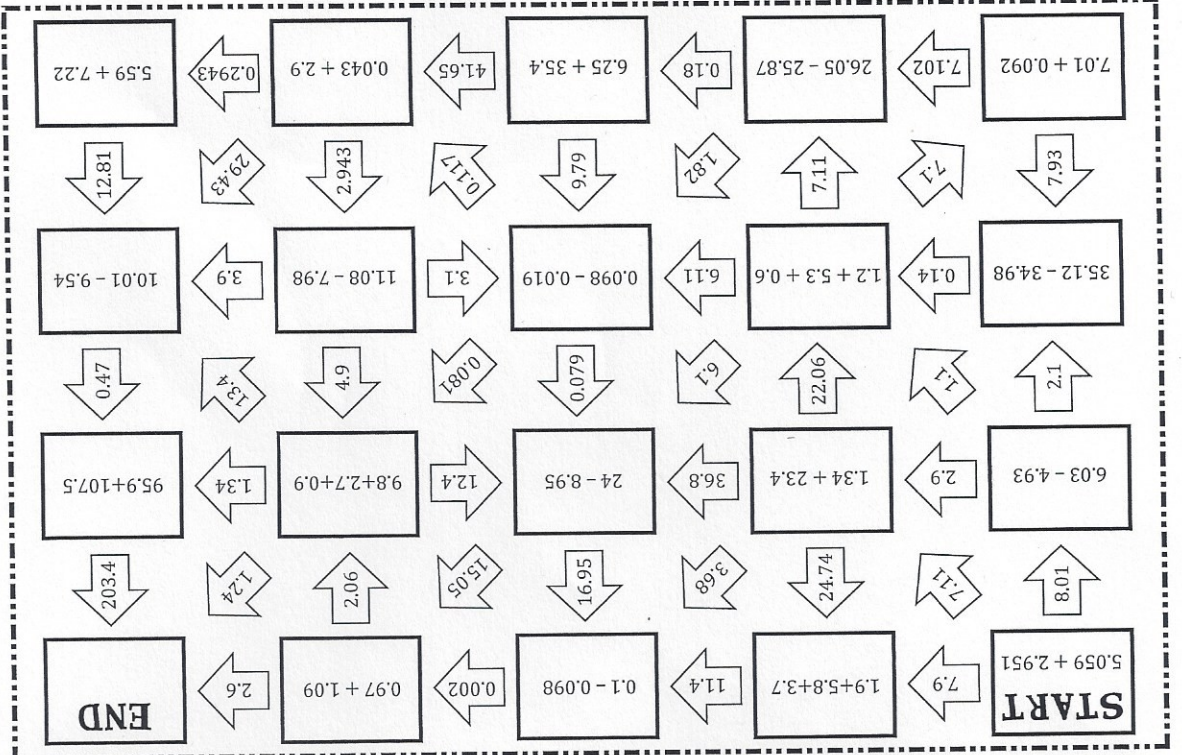
Solve a problem created by your partner				
8.00	9.0	1.85	2.75	
=6.38	+5.78	=0.51	+3.64	



<b>FINISH</b>				
---------------	--	--	--	--

# DECIMAL MAZE ACTIVITY

Directions: Begin with the problem located in the 'start' rectangle. The result of the first problem will tell you which direction to move for the next problem. Keep working until you make it to the 'end' rectangle. Make sure you show your work.



Name: \_\_\_\_\_

Date: \_\_\_\_\_



# Day 8 Long Division


quotient  
divisor ) dividend

**Standard:** 6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.

**Objective:** I can use long division to divide whole numbers that result in a whole-number quotient, and multiply the quotient by the divisor to check the answer.


**Warm Up:** Study multiplication facts! (Focus on 11's today!)

**Steps to Dividing using Long Division**




**Daddy (divide)**

$$\begin{array}{r} 3 \leftarrow \\ 2 \overline{)68} \quad 6 \div 2 = 3 \\ \underline{6} \phantom{0} \end{array}$$




**Mommy (multiply)**

$$\begin{array}{r} 3 \\ 2 \overline{)68} \quad 3 \times 2 = 6 \\ \underline{6} \phantom{0} \end{array}$$




**Sister (subtract)**

$$\begin{array}{r} 3 \\ 2 \overline{)68} \\ \underline{-6} \phantom{0} \\ 0 \end{array}$$




**Brother (bring down)**

$$\begin{array}{r} 3 \\ 2 \overline{)68} \\ \underline{-6} \downarrow \\ 08 \end{array}$$



**Rex (remainder)**

$$\begin{array}{r} 34 \\ 2 \overline{)68} \\ \underline{-68} \\ 08 \end{array}$$

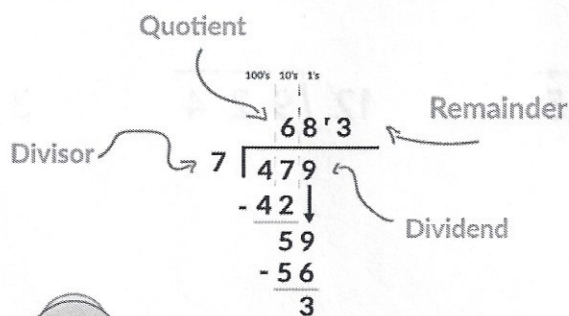


**Cocoa (check answer)**

$34 \times 2 \text{ should} = 68!$

The "anatomy" of a long division problem

$$479 \div 7 = 68r3$$



**Remember!**

Divide Multiply Subtract Bring down

$$11 \times 1 = 11$$

$$11 \times 2 = 22$$

$$11 \times 3 = 33$$

$$11 \times 4 = 44$$

$$11 \times 5 = 55$$

$$11 \times 6 = 66$$

$$11 \times 7 = 77$$

$$11 \times 8 = 88$$

$$11 \times 9 = 99$$

$$11 \times 10 = 110$$

$$11 \times 11 = 121$$

$$11 \times 12 = 132$$

Here is a long-division calculation of  $917 \div 7$ .

$$\begin{array}{r} 131 \\ 7 \overline{)917} \\ \underline{-7} \phantom{0} \\ 21 \\ \underline{-21} \\ 7 \\ \underline{-7} \\ 0 \end{array}$$

a. There is a 7 under the 9 of 917. What does this 7 represent?

b. What does the subtraction of 7 from 9 mean?

c. Why is a 1 written next to the 2 from  $9 - 7$ ?

**Task 2:** Answer question a, b and c.



Han's calculation of  $972 \div 9$  is shown here.

$$\begin{array}{r} 180 \\ 9 \overline{) 972} \\ \underline{-9} \phantom{0} \\ 72 \\ \underline{-72} \\ 0 \\ \underline{-0} \\ 0 \end{array}$$

- Find  $180 \cdot 9$ .
- Use your calculation of  $180 \cdot 9$  to explain how you know Han has made a mistake.
- Identify and correct Han's mistake.

**Task 3:** Find each quotient

a.

b.

c.

$$5 \overline{) 465}$$

$$12 \overline{) 924}$$

$$3 \overline{) 1107}$$

**Task 4:** Choose one of the following options.

Option ★: Complete "Snack Attack" Long Division

Option ★: Complete "Long Division—Create Your Own"



# Snack Attack!

It's time to review the Sales Report for last weeks game! Use the images and chart below to determine how much of each item sold during the game.

 Hot Dog \$ 3	 Pretzel \$ 2	 Nachos \$ 5	 Churros \$ 2
 Candy \$ 4	 Ice Cream \$ 5	 Soda \$ 4	 Popcorn \$ 3

Food	\$ Earned Per Week	Amount Sold?
Hot Dogs	\$ 5,688	
Pretzels	\$ 3,426	
Nachos	\$ 7,895	
Churros	\$ 2,744	
Candy	\$ 6,484	
Ice Cream	\$ 8,470	
Soda	\$ 9,068	
Popcorn	\$ 8,568	

What is the most popular item at your stadium?

----- What about the least popular?



## Long Division

### Create Your Own

In the space below answer the following questions.

1. Define what it means to divide.
2. Create a division problem with at least a 4-digit dividend and a 2-digit divisor. Label the divisor, dividend, and quotient.
3. List the steps of division as if you were teaching someone.
4. Create 3-division word problems and solve them.



# Day 9 Multiplying Decimals

**STANDARD:** 6.EE.A Apply and extend previous understandings of arithmetic to algebraic expressions. 6.NS.B Compute fluently with multi-digit numbers and find common factors and multiples

**OBJECTIVE:** I can find the products of decimals.

**WARM UP:** Study your multiplication facts! Focus on your 12's today!

## How do I multiply decimals?

Video for extra support: <https://youtu.be/kwh4SD1ToFc>

Examples:

a. Find  $4.8 \times 7.2$ .

Estimate  $5 \times 7 = 35$

$$\begin{array}{r} 4.8 \leftarrow 1 \text{ decimal place} \\ \times 7.2 \leftarrow + 1 \text{ decimal place} \\ \hline 96 \\ 336 \\ \hline 34.56 \leftarrow 2 \text{ decimal places} \end{array}$$

So,  $4.8 \times 7.2 = 34.56$ .

Reasonable?  $34.56 \approx 35$  ✓

b. Find  $3.1 \times 0.05$ .

Estimate  $3 \times 0 = 0$

$$\begin{array}{r} 3.1 \leftarrow 1 \text{ decimal place} \\ \times 0.05 \leftarrow + 2 \text{ decimal places} \\ \hline 0.155 \leftarrow 3 \text{ decimal places} \end{array}$$

So,  $3.1 \times 0.05 = 0.155$ .

Reasonable?  $0.155 \approx 0$  ✓

$$12 \times 1 = 12$$

$$12 \times 2 = 24$$

$$12 \times 3 = 36$$

$$12 \times 4 = 48$$

$$12 \times 5 = 60$$

$$12 \times 6 = 72$$

$$12 \times 7 = 84$$

$$12 \times 8 = 96$$

$$12 \times 9 = 108$$

$$12 \times 10 = 120$$

$$12 \times 11 = 132$$

$$12 \times 12 = 144$$

**Task 1:** Estimate each problem first. Find the product of each.

Find $8.1 \times 5.6$	Find $2.7 \times 9.04$	Find $6.32 \times 0.09$
Find $1.785 \times 0.2$	Multiply $1.89 \times 2.75$	Multiply $1.78 \times 4.9$

**Task 2:** Answer each question.

1. Tomatoes cost \$1.29 per lb. You buy 2.75 lbs. of tomatoes. You hand the cashier \$10, how much change do you receive back?

2. Place the decimal point in the correct place in the problem.

$$\begin{array}{r} 1.78 \\ \times 4.9 \\ \hline 8722 \end{array}$$

$$\begin{array}{r} 9.24 \\ \times 0.68 \\ \hline 62832 \end{array}$$

$$\begin{array}{r} 3.75 \\ \times 5.22 \\ \hline 195750 \end{array}$$



**Task 3:** Core students choose 1 of the following. Gate students must complete both!

Option ★: Solve the following problem.

A rectangular painting has an area of 9.52 sq. ft.

- Draw 3 different ways this can happen.
- The cost of the frame depends on the perimeter of the frame. Which of the 3 you drew would be the cheapest. Explain your reasoning.
- The thin black painting costs \$1 per foot. The fancy framing costs \$5 per foot. Is the cost of the fancy framing five times greater than the less expensive framing? Explain your reasoning.

Option ★: Play the quizizz using the code below. Make sure you use your FIRST AND LAST NAME!

**Menhenett:**

Ask participants to open  
joinmyquiz.com

and enter this code

**506854**

**Howard:**

Ask participants to open  
joinmyquiz.com

and enter this code

**824700**

**Task 4: Family enrichment!** (optional for extra credit)

Complete the Math Ad for multiplying decimals.



Name \_\_\_\_\_

# Math Ad

Concept:

Illustrate your concept here.

Describe the concept here:

Tell why it is important here:

Where is it used in the real world?



## Rules

1. Choose a concept and get it approved.
2. Create an ad that will "sell" your product.
3. Tell why it is useful and necessary for math. Sell your audience on the uniqueness and usefulness of your concept.
4. If you can think of places that the concept is used in the "real world" you should mention them in your ad.
5. Make sure that it is fun and colorful.



# Day 10 Volume

**STANDARD:** 6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

**OBJECTIVE:** I can find the volume of rectangular prisms.

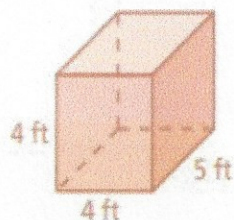
**WARM UP:** Test your Multiplication Skills. Time yourself for one minute to see how many you can complete.

$\begin{array}{r} 10 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 7 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ 7 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$
$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ 1 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 12 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 10 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 11 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 11 \\ \hline \end{array}$
$\begin{array}{r} 10 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 5 \\ \hline \end{array}$										

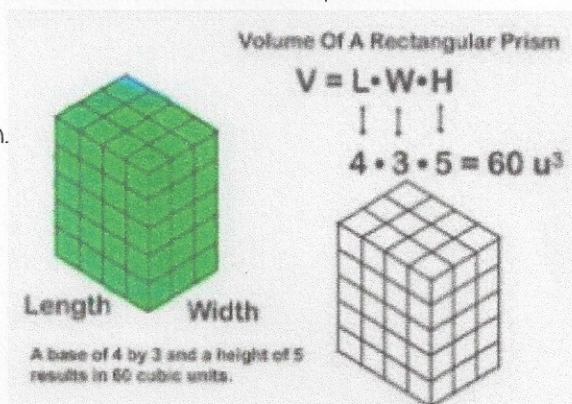
## How do you find volume?

The volume of a three-dimensional figure is a measure of the amount of space that it occupies. Volume is measured in cubic units.

Example 1: Find the volume of a rectangular prism.

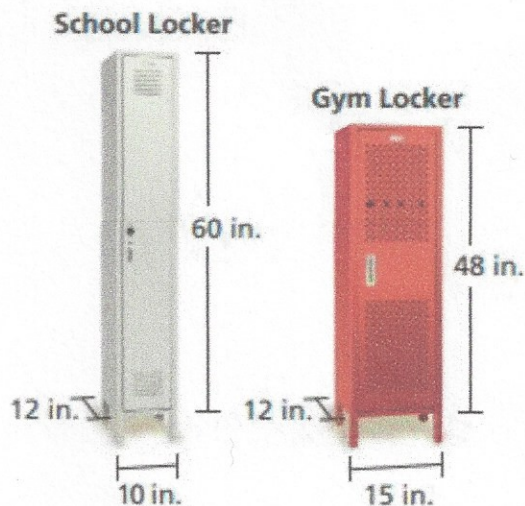


V: \_\_\_\_\_



**Task 1:** Complete Volume of a Rectangular Prism pg. 1

**Task 2:** Each locker is shaped like a rectangular prism. Which has more storage space? Explain.



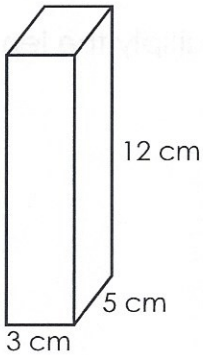
**Task 3:** Complete "Volume of the Building" Activity



Name: \_\_\_\_\_

Pg. 1

# Volume of a Rectangular Prism



To find the volume of a rectangular prism, multiply the length by the width by the height.

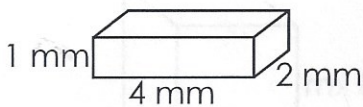
$$V = l \times w \times h$$

$$V = 3 \text{ cm} \times 5 \text{ cm} \times 12 \text{ cm}$$

$$V = 180 \text{ cm}^3$$

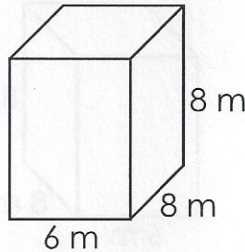
Calculate the volume of each rectangular prism. Be sure to include units in your answer.

a.



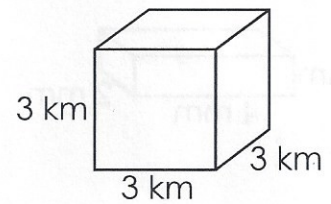
$V =$  \_\_\_\_\_

b.



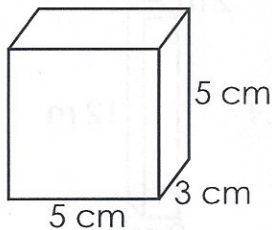
$V =$  \_\_\_\_\_

c.



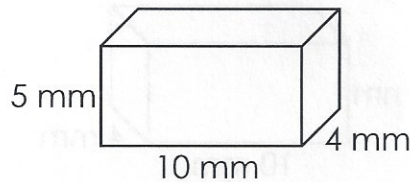
$V =$  \_\_\_\_\_

d.



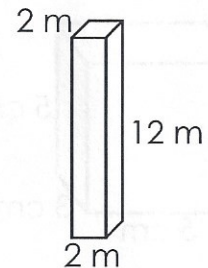
$V =$  \_\_\_\_\_

e.



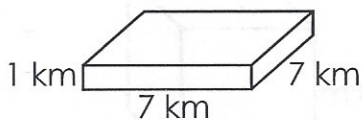
$V =$  \_\_\_\_\_

f.



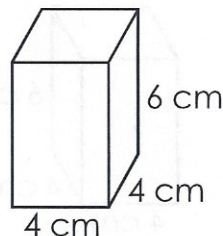
$V =$  \_\_\_\_\_

g.



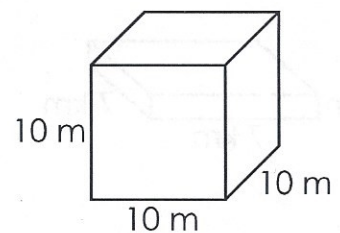
$V =$  \_\_\_\_\_

h.



$V =$  \_\_\_\_\_

i.



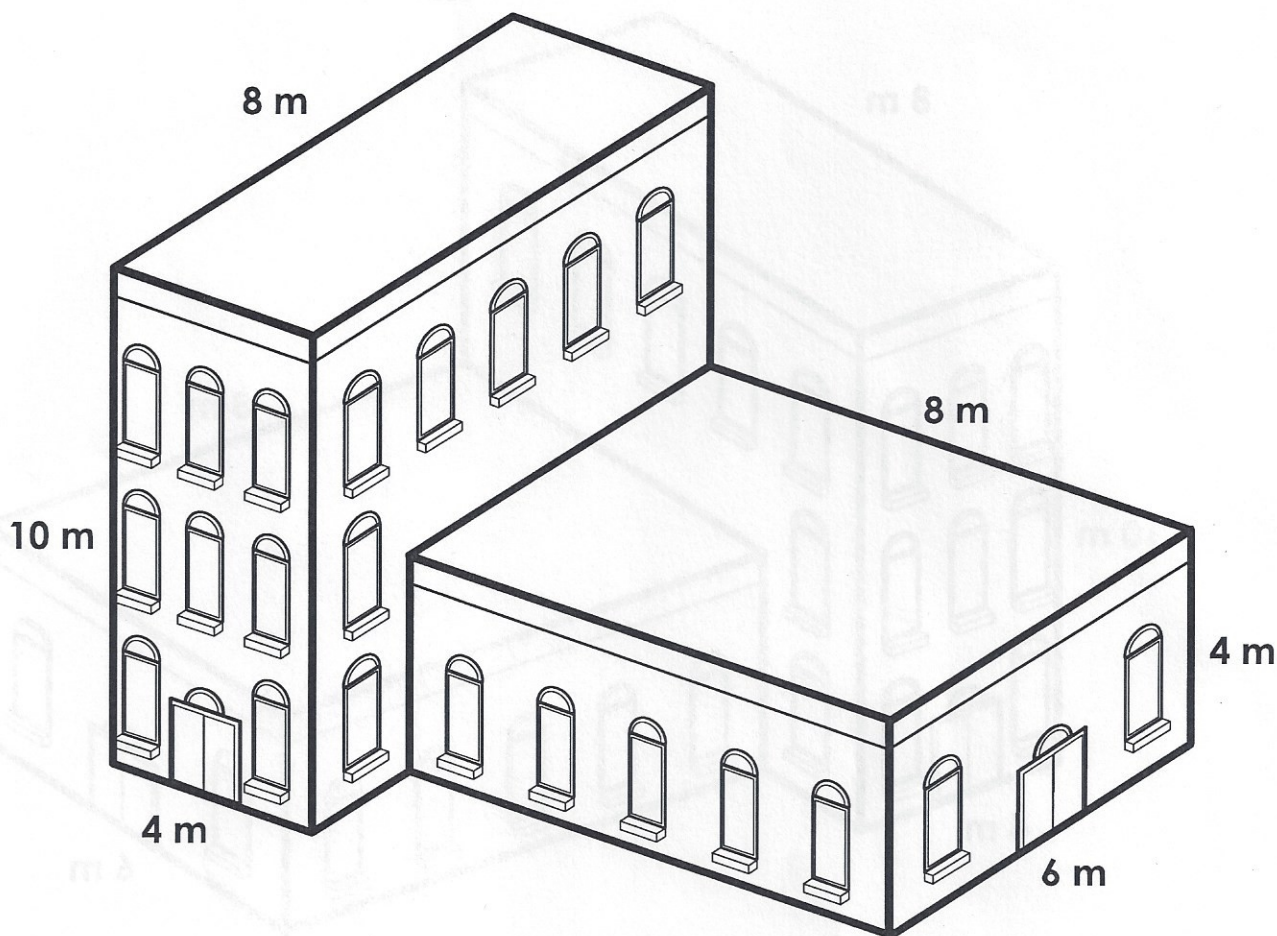
$V =$  \_\_\_\_\_



Name: \_\_\_\_\_

## Volume of the Building

Find the volume of the building. Calculate the volume of each building part. Then add the volumes of the two parts together.



Volume of part 1:

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}^3$$

Volume of part 2:

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}^3$$

Volume of the building:

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}^3$$



# Day 11 Mean and Median

**STANDARD:** 6.SP.B.5.c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

**OBJECTIVE:** I can find the mean and median of a data set.

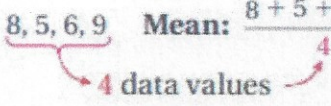
**WARM UP:** Study ALL facts 1-12!

## How do I find the mean?

Video for extra support: <https://www.youtube.com/watch?v=B1HEzNTGeZ4>

### Mean

**Words** The **mean** of a data set is the sum of the data divided by the number of data values.

**Numbers** Data: 8, 5, 6, 9    Mean:  $\frac{8 + 5 + 6 + 9}{4} = \frac{28}{4} = 7$   


**Task 1:** Answer the following questions. Show your work.

- For the past 12 school days, Mai has recorded how long her bus rides to school take in minutes. The times she recorded are shown in the table. Find the mean of the data.

9	8	6	9	10	7	6	12	9	8	10	8
---	---	---	---	----	---	---	----	---	---	----	---

Step 1: Count how many data values there are: \_\_\_\_\_

Step 2: Add all of the data values up: \_\_\_\_\_

Step 3: Divide (step 2) ÷ (step 1): \_\_\_\_\_

- Last week, the daily low temperatures for a city, in degrees Celsius, were, 5, 8, 6, 5, 10, 7, and 1. What was the mean?

- The three data sets show the number of text messages sent by Jada, Diego, and Lin over 6 days. One of the data sets has a mean of 4, one has a mean of 5 and one has a mean of 6.

Jada:

4	4	4	6	6	6
---	---	---	---	---	---

Diego:

4	5	5	6	8	8
---	---	---	---	---	---

Lin:

1	1	2	2	9	9
---	---	---	---	---	---

Which data set has which mean?



## How do I find the median?

Video for extra support: <https://www.youtube.com/watch?v=B1HEzNTGeZ4>

### Median

**Words** Order the data. For a set with an odd number of values, the **median** is the middle value. For a set with an even number of values, the **median** is the mean of the two middle values.

**Numbers** Data: 5, 8, 9, 12, 14      The median is 9.

Data: 2, 3, 5, 7, 10, 11

The median is  $\frac{5+7}{2}$ , or 6.

**Task 2:** Find the median of each data set.

1. 20, 4, 17, 8, 12, 9, 5, 20, 13      2. 100, 75, 90, 80, 110, 102

3. Jada and Diego are practicing the piano for an upcoming rehearsal. The tables list the numbers of minutes each of them practiced in the past few weeks. Find the median of each data set.

Jada's practice times:

10	10	20	15	25	25	8	15	20	20	35	25	40
----	----	----	----	----	----	---	----	----	----	----	----	----

Diego's practice times:

25	10	15	30	15	20	20	25	30	45
----	----	----	----	----	----	----	----	----	----

**Task 3:** Choose one of the two options.

Option ★ Complete "Mean and Median Dice Game"

Option ★ Play the quiz using the code below. Make sure you use your FIRST AND LAST NAME!

**Menhenett:**

Ask participants to open  
[joinmyquiz.com](https://joinmyquiz.com)

and enter this code

**318884**

**Howard:**

Ask participants to open  
[joinmyquiz.com](https://joinmyquiz.com)

and enter this code

**607677**



## Mean & Median Dice Game

Roll your two dice eight times and record your rolls below. Each time add your dice to make one number. Use the numbers you roll to answer the questions below.


Arrange from least to greatest:

Mean: \_\_\_\_\_ Median: \_\_\_\_\_


Arrange from least to greatest:

Mean: \_\_\_\_\_ Median: \_\_\_\_\_


Arrange from least to greatest:

Mean: \_\_\_\_\_ Median: \_\_\_\_\_