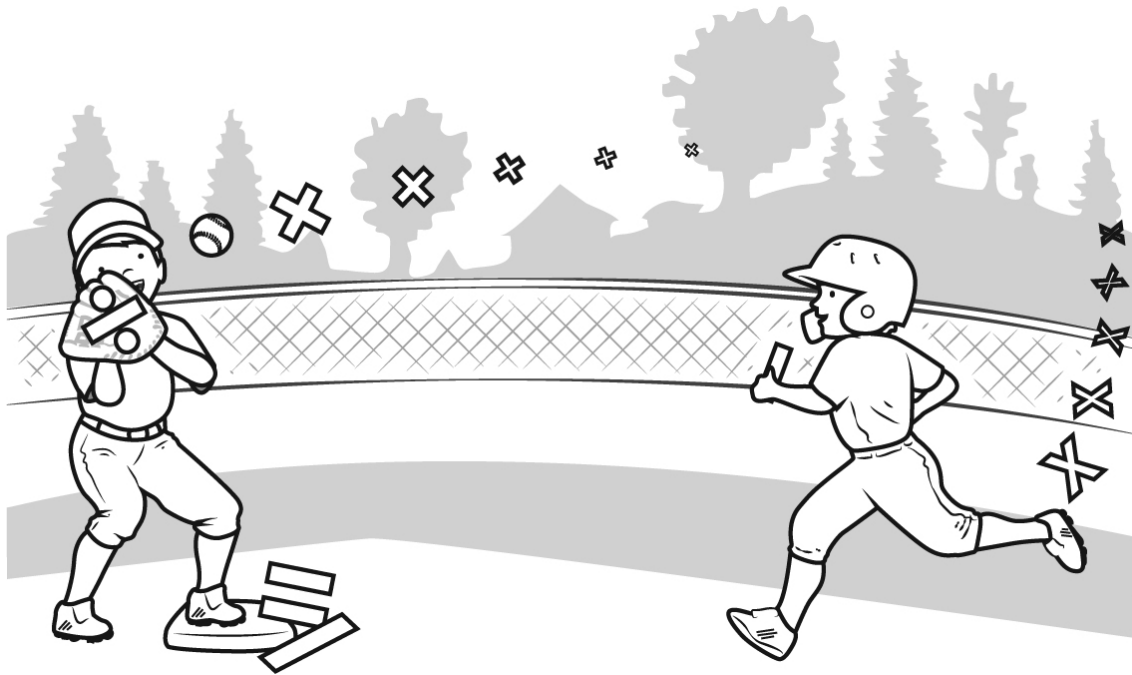


# MONTHLY MATH CHALLENGE

## Homework

April



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

Do all of these,  
but skip 2 pages:

- |                                 |                                  |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> page 1 | <input type="checkbox"/> page 13 |
| <input type="checkbox"/> page 2 | <input type="checkbox"/> page 14 |
| <input type="checkbox"/> page 3 | <input type="checkbox"/> page 15 |
| <input type="checkbox"/> page 4 | <input type="checkbox"/> page 16 |
| <input type="checkbox"/> page 5 | <input type="checkbox"/> page 17 |
| <input type="checkbox"/> page 6 | <input type="checkbox"/> page 18 |
| <input type="checkbox"/> page 7 | <input type="checkbox"/> page 19 |
| <input type="checkbox"/> page 8 | <input type="checkbox"/> page 20 |
| <input type="checkbox"/> page 9 | <input type="checkbox"/> page 21 |

☐ page 10

☐ page 11

☐ page 12

☐ page 13

☐ page 14

☐ page 15

☐ page 16

☐ page 17

☐ page 18

☐ page 19

☐ page 20

☐ page 21

☐ page 22

☐ page 23

☐ page 24

Find a helper.

He/she helped by checking my work.



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

"I have 2 dogs," David began. He was presenting to his class. "I first got Luna and then after that got Daisy. My research is about dog years. Daisy is exactly 5 years old in human years; it's her birthday! Some would say she is  $5 \times 7$  or 35 years old in dog years. Multiplying human years by 7 to get dog years is so old school."

"Wait, wait!" yelled Clara in the first row. "I know. You take the number of human years, add 3, then subtract 2, and multiply that by 6.32. That means Daisy is 37.92. How old! "

"Not even close," said David. "But I found something better than the multiply by 7 rule. This equation says a dog's first year of life is about 15 human years. A dog's second year equals about 9 human years. Every year after that is about 5 human years. "  
How old is Daisy in dog years using David's equation?

"Great job!" said David in his presentation. "But here is a challenge. Luna is older than Clara. Luna is 55.25 years old in dog years using my equation. How old is she in human years? I will give you a hint. Her birthday was 3 months ago."

"Wait, wait!" yelled Clara. "That hint is not very helpful!"

"Just try to figure it out," replied David.

How old is Luna in human years?

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

On April 1, 1700, the April Fools' tradition was popularized. Also called All Fools' Day, the tradition of playing pranks on this day traces back several centuries prior to 1700. It is thought to have begun in 1582 when France switched from the Julian to the Gregorian calendar, a change which moved the start of the New Year from the last week of March to January 1. People who didn't realize or forgot to make that change became the target of pranksters around April 1. Assume that this math question was written on April 1 of this year. How many months has it been since the April Fools' tradition was popularized?

Show your work.

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

There are 3 birthdays in our class for the month of September. Jacob, Justin, and Emily all have birthdays. Emily is the last to celebrate. Her birthday is on the last day of the month. If you add the day numbers of the other birthdays, it equals the day number that Emily celebrates her birthday. The first person to celebrate is Jacob. His birthday is 20 days before the next birthday. On what day numbers are each of their birthdays?

Anne drew a square with an area of 8 square centimeters. Adam drew a square with an area of 13 square centimeters. How much bigger is the perimeter of the square that Adam drew than the perimeter of the square that Anne drew?

Mary is buying candy mixes for goodie bags. Each fun mix packet weighs 4 ounces. She purchased 6 pounds. How many packets did she buy?  
(Hint: 1 pound = 16 ounces)

I decided to skip this page  
edHelper

**Name:**

The block below is the sum of the two blocks above. Fill in the missing blocks.

[illegible]

$3\frac{7}{10}$		5	$2\frac{7}{10}$
		$5\frac{1}{2}$	

In the number 7,925,182, the digit 1 is in what place?

---

$$\begin{array}{r} 65 \\ - 24 \\ \hline \end{array}$$

1 lb = 16 oz

11 lb = \_\_\_\_\_ oz



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

On April 2, 1513, Ponce de Leon landed at St. Augustine, FL, the oldest city in the continental U.S. On April 26, 1607, Jamestown, VA, was founded, making it the second oldest city in the continental U.S. There are 654 miles between the two cities.

Drew was riding his bike from St. Augustine to Jamestown, but he sprained his ankle during the trip and had to drive the rest of the way. If he biked 223 miles, how long would it take him to drive the remaining miles at an average speed of 65 mph? Round your answer to the nearest tenth.

Show your work.

☐

I did page 6

☐I decided to skip this page  
edHelper

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

Get a fidget spinner! Spin it.

I needed to spin \_\_\_\_\_ time(s) to finish.

Write the least possible  
3-digit number using only 2  
different numbers.

Round 1988 to the nearest  
hundred.

There are 2 groups of 4  
rocks. How many rocks?

How many total legs are on  
20 dogs.

How many tens are in the  
number 50?

$$36 \div 6 = 6$$

Peter bought 4 dozen  
cupcakes for a party. How  
many cupcakes did he buy?

77 divided by 11 equals

$$8 \div \frac{1}{2}$$

$$10 + 7 \times 9$$

Know how many inches in  
a foot? Okay, smarty pants,  
how many inches in 4 feet?

How many centimeters in 1.8  
meters?

☐

I did page 7

☐I decided to skip this page  
edHelper

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

Spin again.

I needed to spin \_\_\_\_\_ time(s) to finish.

$$\underline{\hspace{2cm}} \div 12 = 11$$

Double the number 11 three times.

A book has 6 pages. Each page has 10 dimes. How many dimes in the book?

Write the number that has exactly 5 millions.

Hunter earns \$22 an hour. He worked 4 hours. How much did he make?

Write a 2-digit even number.

How much time is it from 8:00 a.m. to 11:20 a.m.?

38, 57, \_\_\_\_\_, 95, 114,  
133, 152, 171

Estimate quickly the difference.  
 $6,010 - 2,670$

How many minutes is it from 8:00 a.m. to 11:20 a.m.?

Write  $\frac{2}{4}$  in lowest terms.

How much money is 1 quarter, 7 dimes, 1 nickel, and 1 penny?

G, I, K, M, O, Q,  
\_\_\_\_\_, U, W, Y

What 4 coins add up to 17 cents?

E, F, G, \_\_\_\_\_, I, L, K,  
O, M, R



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

$81\frac{5}{8}$	<b>+2</b>		<b><math>+\frac{1}{2}</math></b>				<b><math>+\frac{3}{8}</math></b>		<b><math>-8\frac{1}{8}</math></b>
					$-9\frac{1}{2}$	<b>-52</b>			
							<b>+27</b>		
					<b>-19</b>	$-\frac{2}{8}$			
							$-\frac{1}{2}$		
					<b><math>+\frac{5}{8}</math></b>	<b>+1</b>			
							$-7\frac{1}{2}$		
$-\frac{1}{2}$		$-3\frac{6}{8}$		<b>+24</b>		<b>+59</b>	$-\frac{1}{2}$		
<b>+49</b>		<b>+17</b>		<b>+23</b>	<b>165</b>	<b><math>+\frac{4}{8}</math></b>	<b>-15</b>	<b>169</b>	

Write a letter that has a line of symmetry.  _____	$\begin{array}{r} 847 \\ - 277 \\ \hline \end{array}$	10 cm = _____ mm
--	---	------------------

word root **dactylo** can mean **finger**      **pterodactyl**

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

The number 994 is the largest whole number that, when rounded to the nearest \_\_\_\_\_, will be 990.

The product of three consecutive numbers is 990. What are the numbers?

Use any of these digits. Cross off a digit after you use it.

**4                      7                      7                      5                      4                      1**

Make the largest number that you can that is greater than 4,542 but is less than 5,083.

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

Julie and her three best friends all went out to dinner at J. Gilbert's. Julie's mom drove them and sat at a different table. The girls had a great time and had great food. They laughed about their day, planned a sleepover party for the next weekend, and talked about their favorite TV shows. They shared chips and salsa, each got their own hamburger, and then split a dessert. The chips and salsa cost \$4.00. Each burger was \$10.00. The chocolate molten cake they devoured for dessert was \$6.00. When the bill came, the girls split it equally. They also each chipped in \$4.00 to leave as a tip for their waiter. Each girl brought \$20 to the restaurant. How much change will they each take home?

Show your work.

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

It was a beautiful Saturday. Joe and his friend Mike were bored and broke. They wanted to do something outside, but they also wanted to make some money. They decided to have a lemonade stand. They convinced Joe's mom to loan them the money for the supplies on the condition that they repaid her from their earnings. Mrs. Cummings spent \$3.00 on cups, lemons, and sugar. The boys made all the lemonade and set up a stand. They were outside for three hours before closing for the day. They sold 10 cups of lemonade the first hour, 15 cups the second hour, and 5 cups the third hour. They charged \$0.25 for each cup. They paid Mrs. Cummings back for the supplies and split the rest of the money evenly. How much money did each boy make?

Show your work.

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

### Sudoku Sums of 6

Each row, column, and box must have the numbers 1 through 6.  
Hint: Look for sudoku sums. The sum of the two boxes inside of the dashed lines is 6.

Here is an example of a sudoku sum of 6:

1

5

		1			6
				2	
2	4		6		
				5	2
	3			1	
					5

12

x 12

What is the value of the BIG digit?

639,156,423

Circle the largest number.

837

871

825

795

808

783

- ☐ balloon
 ☐ bellooon
 ☐ buhloonn
 ☐ ballon

How many hours are in two days?

\_\_\_\_\_

How many pints are equal to 2 gallons?

\_\_\_\_\_

34

+ 69



☐

I did page 13

☐I decided to skip this page  
edHelper**Name:** \_\_\_\_\_

Samantha and Caroline went to the mall. Caroline brought some money, and Samantha had even more money. Altogether they had \$62.

"I'm getting these earrings. They're only \$13," says Caroline.

"Don't laugh, but this unicorn bag is \$29. It's a little expensive, but I think I'm going to get it," replies Samantha.

"Hey, did you see the buy 2, get 1 free sign? Want to put our order together and pick out something for free?" asks Caroline.

Samantha gave money for the bag, and Caroline gave money for the earrings.

"That's weird. We now have the same amount of money!"

How much money did Samantha start out with?

Show your work.

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

David had 64 firecrackers. He traded 21 of his firecrackers for sparklers. Write an expression to show how many firecrackers he has left.

Robert had 75¢ to buy chocolate ice cream. Alex gave him 50¢ more. Robert spent 90¢ for a chocolate cone. How much money does he have left? Write an expression to find the amount of money he has left. Solve it.

Jessica likes to run. She started using a running app on her phone in March. During the month, she ran an average of 2.4 miles per day. How many miles did she run for the entire month?

Maria has a messy desk. She has a total of 33 markers, pens, and pencils.

She has 4 times as many markers as pens.

She also has 9 more pencils than pens.

How many pencils does she have?

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

"That song again?" asked Anna.

"Yeah. I can't get it out of my head," replied Jack. "Luckily I got this new Out of Your Head app. It repeats songs. You first setup how long you want it to repeat. When you start the app it doesn't first play the song, it waits that long. I have it set to repeat this song every 8 minutes. It's a quick song, it lasts only 2 minutes."

"Cool!" replied Anna. Anna installed the app on her phone. She set up the app for 15 minutes. Her song is a little longer. When she starts the app it will first wait 15 minutes before it will play her song, which lasts 3 minutes. The app will then wait another 15 minutes and then play the song again. It will keep doing that until you stop the app.

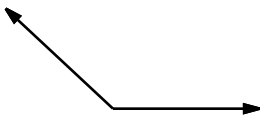
"Hey, Anna. Let's start the app at the same time. My song will begin in 8 minutes. Your song will begin in 15 minutes. I wonder when both of our songs will be playing music at the same time."

How long until both songs are playing at the same time?



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

$8\frac{2}{6}$	$-2\frac{3}{4}$		$+12$				$+9$		$-3$
					$+4$		$+55$		
								$-8\frac{3}{6}$	
					$-\frac{4}{6}$		$-\frac{2}{4}$		
								$+16$	
$-24$		$-\frac{1}{4}$		$+59$		$-6\frac{2}{4}$			
								$+\frac{4}{6}$	
$+18$						$+\frac{3}{4}$	$+40$		
$+27$		$-7\frac{2}{4}$		$+\frac{1}{6}$	$93\frac{1}{3}$	$-\frac{1}{6}$	$-37$	$159\frac{1}{12}$	



What kind of angle is this?

Sketch 2 lines  $\overleftrightarrow{FG}$  and  $\overleftrightarrow{VW}$  that are parallel.

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

Peter invented his own way of remembering numbers. He thinks of each number as a color, which is useful when he plays a spy game with Josh.

The secret key they know is 1 for dandelion, 2 for banana mania, 3 for magic mint, 4 for spring green, 5 for mountain meadow, 6 for asparagus, 7 for teal blue, 8 for canary, and 9 for manatee.

"Hi, Josh," said Peter. "I think someone might be listening, so I cannot give you the entire 4-digit password to the phone."

"No problem," replied Josh. "What are the colors?"

"It's spring green for the first digit, it's ahhhh-chooo for the second digit, manatee for the third digit, and canary for the fourth digit."

"Wait!!! I didn't get that second digit. I think you sneezed!"

"I can't say," smiled Peter. "But I will tell you that the 4-digit code to break into the phone is exactly divisible by 14. That should tell you the answer."

Peter always makes it sound easy when they are playing. Help Josh figure out the 4-digit code.

Hey detective - Help Josh!

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

Lucas helped his father plant the vegetables in their garden. They have seven hundred eight seeds. If they want to plant forty-one seeds per row, how many rows can they make?

Mr. Robinson asked his class to make a list of at least three things they could do to "beat the blahs." If the fourteen students in the class each turned in a list with five ideas on it, how many ideas did they have in all?

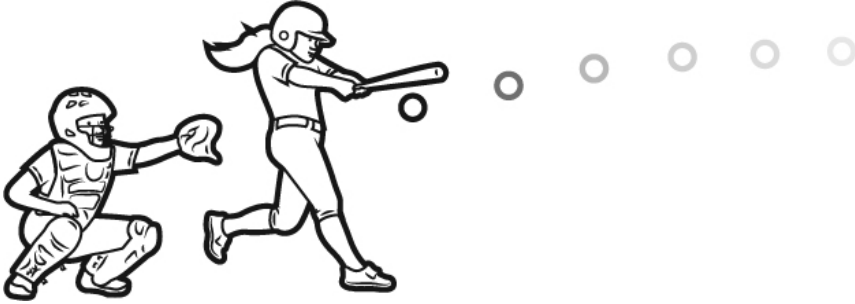
Mr. Lee made 99 cups of chocolate milk for the party. Each person at the party drank 3 cups of milk. There were 15 cups left over. How many people were at the party?

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

Rosa has a new job working at Pizzeria Magpie. She loves it, but she can only work two hours on Monday, two hours on Tuesday, and nine hours on Saturday. The pizzeria will give her a check every two weeks. She will be paid \$11.50 per hour. How much will her first paycheck be?

A number is greater than 14 and less than 30. This number has exactly 4 factors.  
The sum of its factors is 40.  
What is the number?

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



Write your own math problem here.

Ask the person who helped you to try to solve your problem.

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

Put a circle around the smallest number. Put a square around the largest number.

What is the difference between the largest and smallest numbers?

8.34

8.412

8.4120

8.43

$$12 \times 3 + 10 - 5$$

What is 50% of 1,464?

A toy car can go 3 mph.  
How long would it take to  
go 7 miles?

The diameter of a circle is  
856 cm. What is the radius  
of this circle?

$$39 + n = 50$$

How many minutes is it  
from 6:00 a.m. to 10:35 a.m.?

How many ounces are in 4 pounds?

\_\_\_\_\_ ounces

Circle the conjunction in the  
sentence.

I bought seven candy bars  
and a 2-liter bottle of soda.

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

Eleven less than a number is thirty-one.  
What is the number?

A number minus 54 is twenty-three. What is  
the number?

If a number is increased by 7, the result is  
40. What is the number?

Fourteen less than 8 times a number is 66.  
What is the number?

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

Twenty-two exceeds one-fourth of a number by 8. What is the number?

Two times a number is  $11\frac{5}{7}$ . What is the number?

Three-sixths of a number equals 1,395. What is the number?

Four-fifths of a number equals 160. What is the number?



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

Fill in each box of the edHelperKu puzzle, using the numbers from 1 to 5.

Every row must contain the numbers 1, 2, 3, 4, and 5.

Every column must contain the numbers 1, 2, 3, 4, and 5.

In a cage with a plus sign, the given number will be the sum of all the digits in the cage.

7+	10+			9+
				4
	9+	10+	1	
	1		7+	
3		3+	8+	2
9+				

Fill in the blanks. These equations are from the puzzle above.

$$1 + \underline{\quad} = 3$$

$$4 + \underline{\quad} = 9$$

$$\underline{\quad} + \underline{\quad} + 3 = 10$$

$$\underline{\quad} + 1 + \underline{\quad} = 9$$

$$\underline{\quad} + \underline{\quad} + 1 = 10$$

$$5 + \underline{\quad} = 9$$

$$\underline{\quad} + 2 + \underline{\quad} = 7$$

$$\underline{\quad} + \underline{\quad} + 3 = 8$$

$$\underline{\quad} + 4 + \underline{\quad} = 7$$

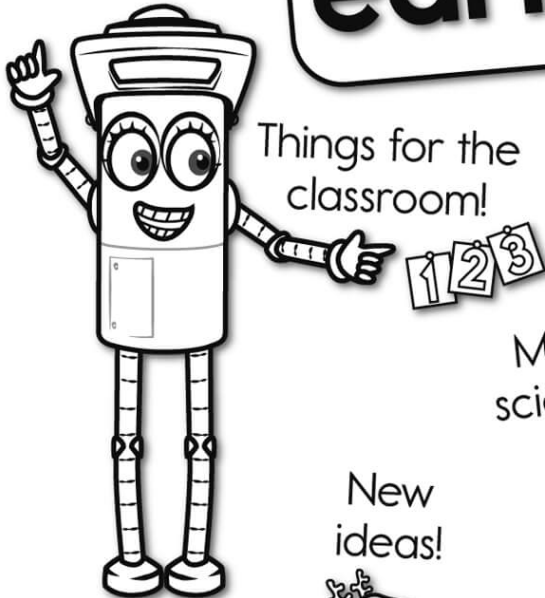


It's NO PREP  
at edHelper.



**edHelper.com!**

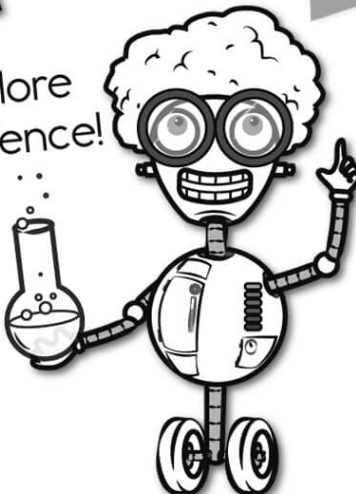
**only \$19.99  
per year**



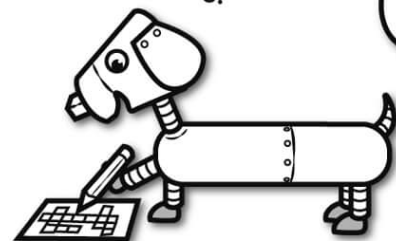
Things for the  
classroom!



More  
science!



More  
puzzles!



More  
history!

