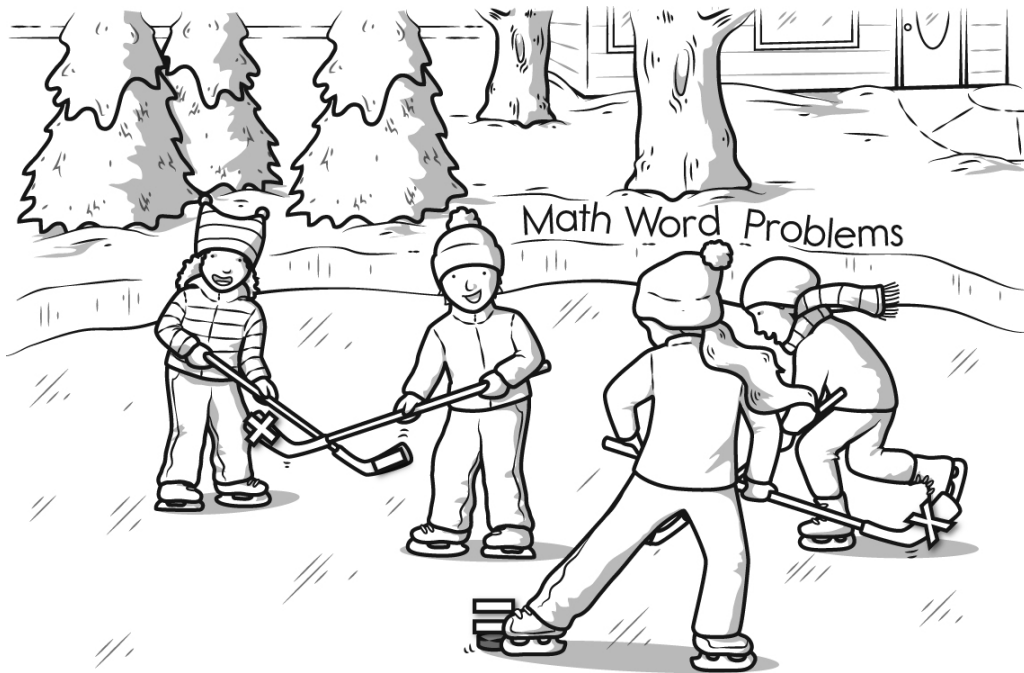


# MONTHLY MATH CHALLENGE

## Homework

### February



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

Do all of these,  
but skip 2 pages:

- |                                 |                                  |                                  |
|---------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> page 1 | <input type="checkbox"/> page 10 | <input type="checkbox"/> page 22 |
| <input type="checkbox"/> page 2 | <input type="checkbox"/> page 11 | <input type="checkbox"/> page 23 |
| <input type="checkbox"/> page 3 | <input type="checkbox"/> page 12 | <input type="checkbox"/> page 24 |
| <input type="checkbox"/> page 4 | <input type="checkbox"/> page 13 | <input type="checkbox"/> page 25 |
| <input type="checkbox"/> page 5 | <input type="checkbox"/> page 14 | <input type="checkbox"/> page 26 |
| <input type="checkbox"/> page 6 | <input type="checkbox"/> page 15 | <input type="checkbox"/> page 27 |
| <input type="checkbox"/> page 7 | <input type="checkbox"/> page 16 | <input type="checkbox"/> page 28 |
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|                                 | <input type="checkbox"/> page 20 | <input type="checkbox"/> page 32 |
|                                 | <input type="checkbox"/> page 21 |                                  |

Find a helper to double-check  
your work. Write their name:

**Hand in by February 28.**

Feel free to hand in early!

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

Write the ratio as a fraction in lowest terms.  
11 to 43

Reduce  $\frac{8}{16}$  to its lowest terms.

An angle measures  $18^\circ$ .  
What would you call this angle?

111 is what percent of 148?

$$-48 \div -6 =$$

$$\frac{???}{7} = 2$$

What is the missing number?

$$\frac{N}{8} = 3$$

What is the value of N?

$$\begin{array}{r} 9.3 \\ \times 8.8 \\ \hline \end{array}$$

$$22n = 638$$

Write the complement of each angle.

$$32^\circ$$

$$8^\circ$$

$$13^\circ$$

$$43^\circ$$

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I did page 2

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edHelper

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

Get a fidget spinner! Spin it.

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

$$\frac{5}{6} \times \frac{2}{6}$$

$$4 \times (56 \div 7) - 55 \div 11 =$$

$$19y - 21.2 = 35.8$$

$$y =$$

What is the area of a rectangle with a length of 45 centimeters and a width that is  $\frac{1}{5}$  the length?

At the dive meet Jack received scores of 6.7, 5.2, 6.3, 4.9, and 5.2. The largest and smallest scores were dropped and the rest were averaged for a final score and rounded to the nearest tenth. What is the final score Jack received?

A circle graph has four sections. Only three sections are labeled. The labels are 7%, 19%, and 17%. What should the missing section be?

$$4 + 10 \times 6 + 5$$

What is the remainder of 54 divided by 8?

$$9 \times 9 = Z^y$$

What is the value of Z and y?

$$6 \times 6 \times 6 \times 6 = x^4$$

What is the value of x?

$$(10 + 15) + 3 = 2(v + 12)$$

What is the value of v?

Each side of a regular pentagon is 73.7 centimeters. What is the perimeter?

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

Convert to a fraction or mixed number and simplify.

Write the decimal number for:

two hundred forty-seven  
and ninety-seven  
hundredths

$$0.016 \overline{) 0.01952}$$

$$90 \overline{) 8.1}$$

Change  $\frac{14}{25}$  to a decimal.

$$17 \overline{) 73.61}$$

$$\begin{array}{r} 2.01 \\ \times 0.6 \\ \hline \end{array}$$

Write each as a decimal.

$$5860 \frac{95}{1000} =$$

$$40 \frac{7}{10} =$$

$$888 \frac{88}{10000} =$$

$$645 \frac{182}{10000} =$$

Write the decimal in words.

4.012

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

It is a very good toad season. Toads are everywhere! You decide to go out at night and count how many are in the front yard. Last night you counted nineteen. Tonight you find twenty-nine. How many more are there tonight compared to last night?

Ms. Floop completed a long calculation using her calculator and ended up with the following result: 85.262565925658. She knew that her initial data were not that precise, so she rounded to the nearest hundredth. What was the rounded result?

John and his friend David puzzled over a fraction. John thought it was closer to .125, but David thought it was closer to .2. The fraction in question was  $\frac{3}{16}$ . Who was correct? Explain.

The PRIMINATOR was Jessica's latest invention. It was designed to demonstrate how prime factors could be used to reduce fractions. Oh, and by the way, how are prime factors used to reduce fractions (explain)?

Melville's Meat Munchies sold 34 hot dogs Monday, 26 on Tuesday, 37 on Wednesday, 36 on Thursday, and 56 on Friday. Find the mean number of hot dogs sold that week.

Emma did  $36\frac{1}{3}\%$  of the remodeling work on the house, and Anne did  $19\frac{3}{4}\%$  of the work. What percent of the total work did they do?

If  $5x = 75$ , then  $x =$

$$6 \times 6 \times 6 \times 6 \times 6 = 6^x$$

What is the value of  $x$ ?

Simplify.

$$\frac{14}{21} =$$

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I did page 5

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edHelper

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

April looked at the prices of the fancy pens and quickly estimated (to the nearest dollar) the cost of a typical fancy pen. The prices were \$2.41, \$3.28, and \$6.20. What is the cost of a typical fancy pen, and how did she do it?

The diameter of a U.S. quarter is about  $\frac{15}{16}$  inches. If 25 of them were placed face-down, touching each other in a row, how long would the row be?

Consider the following problem:  $x/3 + 16 = 11$ . What two equality properties are used to solve the equation for  $x$ ? What is  $x$  equal to in this case?

Max averaged two numbers together to get 36. If one of the numbers is 30, what is the other number?

Alex reads very fast. Sometimes he isn't sure what he has read, he reads so fast. He can read 6.5 pages in 0.15 hours. How many pages can he read in 2 hours?

Farmer Ochoa produced  $2\frac{2}{3}$  times as much corn this season as he did last season. What was this season's production compared to last season's, expressed as a percent?

$t - 8 + t = 40$   
What is the value of  $t$ ?

If  $g = 6$  and  $x = -39$  then what is the value of  $v$ ?  
 $12g - 9x - 3x = v$

$0.005 \times 0.8$

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

$$7 \overline{) 307}$$

Divide and write remainder.

$$6 \overline{) 36}$$

Divide and write remainder.

$$\begin{array}{r} 434 \\ 811 \\ + 750 \\ \hline \end{array}$$

$$8 \overline{) 27}$$

Divide and write remainder.

$$584 + 55 =$$

$$\begin{array}{r} 2,271 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 44,287 \\ 75,363 \\ 22,659 \\ + 19,260 \\ \hline \end{array}$$

$$\begin{array}{r} 3,079 \\ 5,214 \\ + 4,698 \\ \hline \end{array}$$

$$72 \times 263 =$$

Find the difference  
between 5,504 and 5,242.

$$\begin{array}{r} 1,191 \\ - 521 \\ \hline \end{array}$$

$$\begin{array}{r} 721 \\ - 53 \\ \hline \end{array}$$

☐

I did page 7

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

Christian has a total of one hundred forty-nine pennies, dimes, and quarters. He has two and a half times as many quarters as dimes and one-third as many pennies as dimes. How much money does he have?

Amanda has a total of \$24.28. She has four times more dimes than pennies, twenty-one more quarters than pennies, and fifty-four fewer pennies than nickels. How many of each coin does she have?

Kaylee has a total of ninety-one coins. If she had 5 times the number of nickels and one-half the number of quarters, she would have \$0.80 less. How much money does she have?

James has fifteen fewer dimes than nickels. James has a total of thirty-three nickels and dimes. At the mall, James spent three nickels and eight dimes. How much money does he have left?



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

Victoria's pennies total \$1.29 less than her nickels, of which she has one-fourth as many as she has quarters, which total \$36.44 more than her pennies. How many of each coin does she have?

Brianna has a total of three hundred seventy nickels, dimes, and quarters. She has four and a half times as many dimes as quarters and one-fifth as many nickels as quarters. How many of each coin does she have?

The value of a mix of Cody's nickels and quarters is \$6.35. If the nickels were replaced by pennies, the value would be \$5.47. How many of each coin does he have?

Courtney has a total of one hundred ninety-two pennies, nickels, and quarters. She has a total of \$12.16. She has two times as many nickels as quarters and one-third as many quarters as pennies. How many of each coin does she have?

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

Rosa is giving away money to everyone at her birthday party. For each consonant in a name, she gives out \$2.60. For each vowel in a name, she gives out \$3. Rosa's BFF just left the party. Rosa gave her \$16.40. How many consonants and vowels could be in her BFF's name?

What is one possible name for Rosa's BFF?

Maria's math teacher put a cup filled with jellybeans on her desk. She then asked everyone to guess how many beans were in the jar. April guessed 197 and was off by 3. Anne guessed 205 and was off by 11. Mary guessed 196 and was off by 2. Ava guessed 209 and was off by 15. Alex guessed 200 and was off by 6. Can you figure out how many beans are really in the jar?

It's 5:28 p.m., and Kevin sets his watch to the correct time. His watch has trouble keeping track of time. It gains 4 seconds every hour. Most people would find another watch, but this has been his watch since forever, and he won't give up on it. The following day his watch alarm goes off at 8:69 a.m. to wake him up. The watch says 8:69 a.m., but what is the real time?

Sometimes stores will give you a better deal if you spend more, but the store in this game Sarah is playing has some stores that try to trick you. She stopped by one store in the game for some extra lives. She currently has 18,067 points to spend. This is the store's menu:

746 points for 9 lives  
907 points for 30 lives  
1,675 points for 58 lives  
3,871 points for 113 lives  
4,512 points for 174 lives

If Sarah wants to buy the most lives, what should she buy and in what quantity?

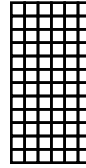
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Name: \_\_\_\_\_

Hunter has 12 one-dollar bills, 11 five-dollar bills, 12 ten-dollar bills, and 10 twenty-dollar bills. He wants to pay a bill of \$73 at the grocery store and get no change. What would be the fewest bills that Hunter could give the cashier and still pay the exact amount of \$73?



How many boxes across and how many boxes down do you think the next shape in the pattern would be. Explain why.

Max is working on a program. He created an expression that takes a number and returns a new number. When his routine was given the number 11, it returned 33. When his routine was given the number 31, it returned 93. When his routine was given the number 47, it returned 141. When his routine was given the number 62, it returned 186. Which of the following expressions could represent the one he used?

- a.  $n + 9n$
- b.  $35n$
- c.  $n + (n - 41)$
- d.  $n + 2n$

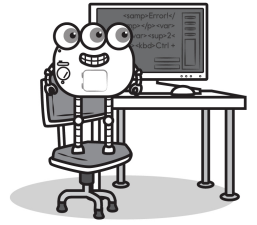


Rosa is playing a game on her phone. In the game, you first spend coins to buy a square plot. Rosa spent 8 coins in the game and was given the square plot as shown above. Using a ruler, what is the area of Rosa's square plot in square centimeters?

Emma entered the game. She spent 24 coins for a square plot. Draw what Emma's square should look like and explain why.

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

Robot was given a math problem to solve.



Seven students worked a total of 14.5 hours selling tickets to the Guy Fawkes Day exhibit. What was the average amount of time (in hours and minutes) worked by each student?

Robot wrote this program in Python to solve it.

```
total_hours = 14.5
total_students = 7

# average time in hours
average_hours = total_hours / total_students

# Convert the fraction hours to minutes
average_minutes = (average_hours - int(average_hours)) * 60

print("The average time worked by each student is " + str(int(average_hours)) +
      " hours and " + str(round(average_minutes)) + " minutes.")
```

Robot's program will print the answer to the math problem.

What will the program print out? Fill in the blanks.

The average time worked by each student is \_\_\_\_ hours and \_\_\_\_ minutes.



### Quick Hints

`int(number)` will round the number DOWN to the nearest integer

For `*` you multiply the two numbers.

For `/` you divide the two numbers.

### Hints

The `int(number)` function in Python is used to round a number DOWN to the nearest integer.

`print(round(34.6))` would print 34

To divide in Python `/` is used.

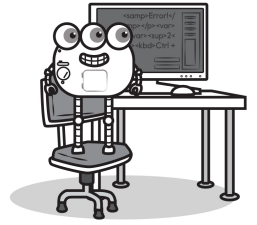
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Name: \_\_\_\_\_

Robot was given a math problem to solve.



What a sour face April made! She wanted to buy a new dress, but she only has  $\frac{2}{3}$  of the money she needs. If she has \$28.16, how much does the dress cost?

Robot wrote this program in Python to solve it.

# Amount of money April has.

april\_money = 28.16

# She only has  $\frac{2}{3}$  of the money she needs, so the dress costs:

dress\_cost = april\_money / (2/3)

# Printing the dress cost

print("The cost of the dress is: \$", round(dress\_cost, 2))

Robot's program will print the answer to the math problem.

What will the program print out? Fill in the blanks.

The cost of the dress is: \$ \_\_\_\_ . \_\_\_\_



### Hints

The round(number) function in Python is used to round a number to the nearest integer.

print(round(44.2)) would print 44

print(round(1.279, 2)) with the "2" option will round to the nearest hundredth and print 1.28

To divide in Python / is used.

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

A core sample from the town square was drilled and collected by Z-Globe. Analysis revealed alternating layers of clay and volcanic shale. Each layer of shale was only about  $\frac{1}{3}$  as thick as a layer of clay. If the total sample was 87 feet in thickness, what was the approximate clay to shale thickness ratio?

During a geological survey by Z-Globe Corporation, a particular parcel of land was found to consist of alternating layers of sand and clay. The thickness of the first clay layer was about 46.5 cm and the second one was about 67.6 cm. There was a layer of sand in between the two clay layers. If the total thickness of the three layers (clay-sand-clay) was about 173 cm, what percent of the total thickness was made up of sand? Round your answer to the nearest hundredth.

Professor Jones counted mammals in a park. She counted thirteen skunks, nine rabbits, and sixteen raccoons. What was the rabbit:mammal ratio?

Which product is closer to zero, the product of  $(87)(-97)$ , or the product of  $(-100)(-142)$ ?

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

There were 14,492 weddings in Springs City last year. According to state records, notaries public performed 10% of the weddings. How many weddings were not performed by notaries public?

Mr. Bloop drives 17 kilometers at an average speed of 55 km/hr. Mrs. Bloop drives the same distance at an average speed that is 1% faster than Mr. Bloop's. How long does it take her to travel the 17 km distance? Round your answer to the nearest hundredth of a minute.

Emily shows her friend Anne a deck of cards. Assuming the cards in the deck are randomly distributed, what is the probability that Emily draws an ace and does not replace it, and then draws another ace?

Mr. Bloop dissolved 5.5 grams of sugar in 123 ml of water. What was the final concentration of sugar (in g/ml)? Round your answer to the nearest ten-thousandth.

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

The sum of two numbers is negative sixty-three. The larger number is fifteen more than the smaller number. What is the value of the larger number?

If Amanda were seven years older, she would be three times as old as Eric. Eric is twenty-one years younger than Amanda. How old is Eric?

Destiny has 7 pounds of brand 165 nuts that sell for \$2.50 a pound. She also has brand 319 nuts that sell for \$2 a pound. If she wants a mixture of nuts that sell for \$2.25 a pound, how many pounds of brand 319 should she add?

The length of a rectangle is seven times its width. The area of the rectangle is eight thousand, five hundred seventy-five square feet. What is the perimeter of the rectangle?

A plane takes 3 hours and 27 minutes to fly from Atlanta to Boston and 3 hours and 49 minutes to fly back. The wind velocity is 30 mph from Atlanta on both trips. What is the airspeed of the plane?

Three servings of cereal and four cups of soymilk have six hundred forty-six calories. There are only four hundred fifty-four calories in two servings of cereal and three cups of soymilk. How many combined calories are there in six servings of cereal and six cups of soymilk?



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

Tyler's investment of 100 shares of NXG has lost 15% of its value this year. The investment is now worth \$935. How much was the original per share cost that Tyler paid for NXG?

Sunday's game sold eight thousand, four hundred nineteen more than two times the number of tickets sold for the game on Monday. The total number of tickets sold for Sunday and Monday was 46,384. How many tickets were sold on Monday?

Twenty times the sum of two numbers is 4,000. The larger number is seven times the smaller number. What are the numbers?

Alyssa and her five friends earned \$46,201 last month. Samantha earned \$274 more than Alyssa. Makayla earned three times as much as Samantha. Olivia earned two times as much as Makayla. Sydney earned three times as much as Olivia. Nicole earned two times as much as Sydney. How much did Olivia earn last month?

Amanda has twelve fewer quarters than dimes and seven fewer pennies than dimes. Amanda has a total of \$8.81. How many of each coin does she have?

The perimeter of a rectangle is 50 feet and its area is 144 square feet. What are the dimensions of the rectangle?

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

In each group, use 4 of the numbers to make a proportion.

40

39

72

56

64

63

25

80

32

34

41

85

Jenna needs to make these two fractions equal. Help her find the missing number!

$$\frac{??}{36} = \frac{35}{84}$$

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

$$(-7.1)(-8.2) =$$

$$(-12.5)(-9.4) =$$

$$(-11.2) - (3.1) - (3.5) =$$

Use  $>$ ,  $<$ , or  $=$  to complete.

$$3.83 \text{ } \underline{\hspace{1cm}} \text{ } -3.8$$

$$-1 \text{ } \underline{\hspace{1cm}} \text{ } -7$$

$$9.2 \text{ } \underline{\hspace{1cm}} \text{ } -9.20$$

$$22 - (-10) =$$

$$-(-27) - (3) =$$

$$-19 - (4) =$$

Use  $>$ ,  $<$ , or  $=$  to complete.

$$-6.80 \text{ } \underline{\hspace{1cm}} \text{ } -6.8$$

$$-7.7 \text{ } \underline{\hspace{1cm}} \text{ } 7.76$$

$$-3 \text{ } \underline{\hspace{1cm}} \text{ } -6$$

$$(5)(-8) =$$

$$(-7)(11) =$$

$$(-11)(-6) =$$

Write the reciprocal of each number.

$$\frac{7}{10} \text{ } \underline{\hspace{2cm}}$$

$$-11 \text{ } \underline{\hspace{2cm}}$$

$$\frac{15}{10} \text{ } \underline{\hspace{2cm}}$$

Simplify.

$$-(-7) \text{ } \underline{\hspace{2cm}}$$

$$-(8) \text{ } \underline{\hspace{2cm}}$$

$$-\left(\frac{2}{5}\right) \text{ } \underline{\hspace{2cm}}$$

Simplify.

$$-\left|\frac{-4}{7}\right| \text{ } \underline{\hspace{2cm}}$$

$$\left|\frac{1}{2}\right| \text{ } \underline{\hspace{2cm}}$$

$$|3| \text{ } \underline{\hspace{2cm}}$$

Simplify.

$$-(-5) \text{ } \underline{\hspace{2cm}}$$

$$-(7) \text{ } \underline{\hspace{2cm}}$$

$$-\left(\frac{2}{6}\right) \text{ } \underline{\hspace{2cm}}$$

$$17 - (-11) =$$

$$-22 - (7) =$$

$$-(19) - (-12) =$$

Simplify.

$$\left|\frac{1}{4}\right| \text{ } \underline{\hspace{2cm}}$$

$$-\left|\frac{-3}{7}\right| \text{ } \underline{\hspace{2cm}}$$

$$|-2| \text{ } \underline{\hspace{2cm}}$$

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

Use  $>$ ,  $<$ , or  $=$  to complete.

-6.20              -6.2

2.2 — -2.23

$$-6 \quad \underline{\quad} \quad -3$$

$$(-11.5)(6.6) =$$

$$(8.3)(-9.5) =$$

$$(-6.5) - (1.1) - (2.6) =$$

Use  $>$ ,  $<$ , or  $=$  to complete.

-2.20              2.2

-4.3              -4.2

4.86 — -4.8

$$\begin{pmatrix} -7 \end{pmatrix} \begin{pmatrix} 7 \end{pmatrix} =$$

$$(11)(-5) =$$

$$(-12)(-11) =$$

Use  $>$ ,  $<$ , or  $=$  to complete.

$$-3.86 \quad \underline{\quad} \quad 3.8$$

-2.2 \_\_\_\_ -2.3

1.70              -1.7

$$(-6)(-5) =$$

$$(12)(-8) =$$

$$\begin{pmatrix} 11 \end{pmatrix} \begin{pmatrix} -6 \end{pmatrix} =$$

$$(-10.7) - (-1.9) - (1.5) =$$

$$(-11.4)(9.6) =$$

$$(-10.5)(7.5) =$$

Use  $>$ ,  $<$ , or  $=$  to complete.

-2.5              -2.3

1.4              -1.40

-4.7      -4.78

$$-15 - (6) =$$

$$-(21) - (-6) =$$

$$-25 - (7) =$$

$$(-12)(4) =$$

$$(6)(-4) =$$

$$\begin{pmatrix} 4 \end{pmatrix} \begin{pmatrix} -4 \end{pmatrix} =$$

$$(-6.3)(4.1) =$$

$$(12.1)(-7.4) =$$

$$(-7.4) - (1.8) - (4.5) =$$

Simplify.

$$-(-9) \underline{\hspace{2cm}}$$

$$-\left(\frac{4}{6}\right) \underline{\hspace{2cm}}$$

$$-\left(\frac{-3}{5}\right) \underline{\hspace{2cm}}$$

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

Five times a number, decreased by twenty-five, equals thirty. What is the number?

If a number is increased by 78, the result is 112. What is the number?

Eleven less than two-fifths of a number equals 1. What is the number?

Two-thirds of a number equals 532. What is the number?

Eleven times a number is  $38\frac{1}{2}$ . What is the number?

One less than a number is twenty-nine. What is the number?

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

Two-sixths of a number equals 48. What is the number?

Twenty-two exceeds one-sixth of a number by 14. What is the number?

681 exceeds ten times a number by 51. What is the number?

Two-fifths of a number equals 28. What is the number?

A number plus 15 is forty-two. What is the number?

The sum of thirty-one and forty-two is sixty more than a number. What is the number?

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I did page 22

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

Emma has a robotic fly that with one charge can fly for 4 minutes and 10 seconds. It has to flap its wings 394 times per minute to stay in the air. How many times will it flap its wings during one flight after a full charge?

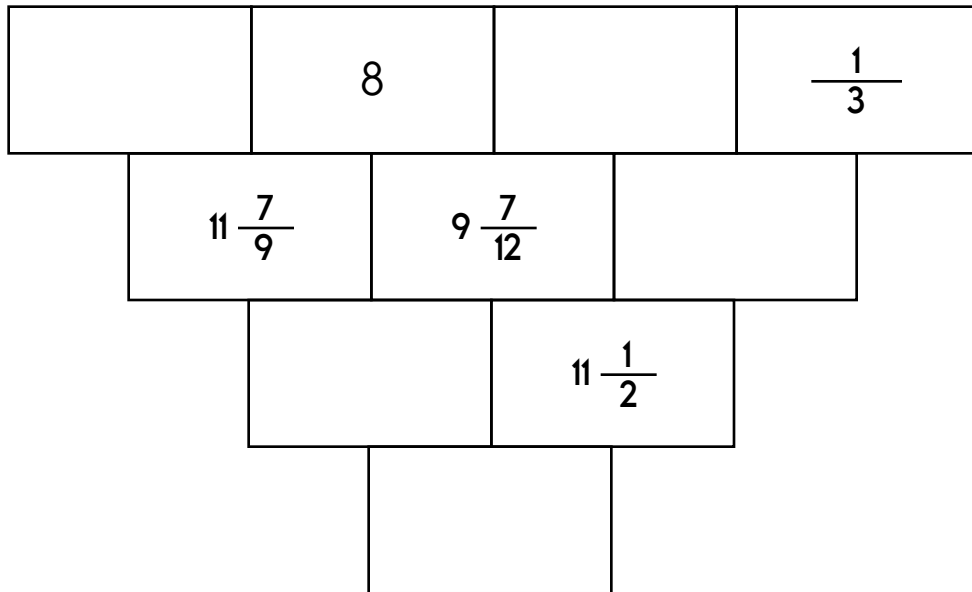
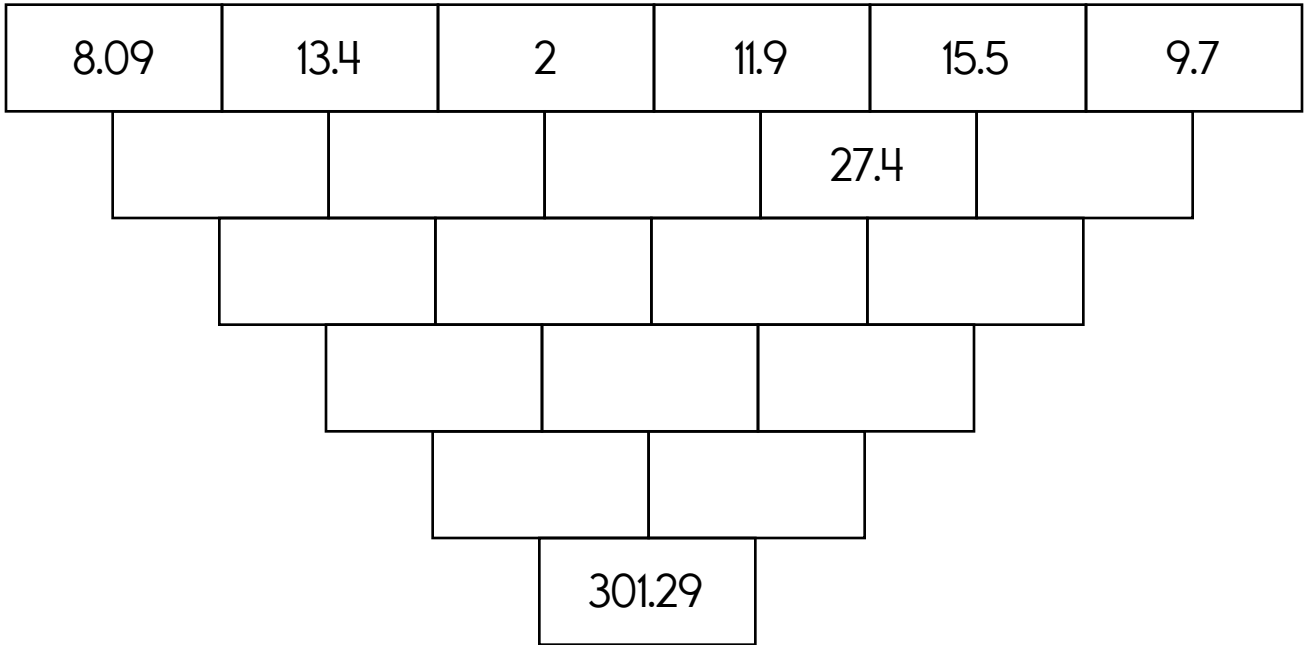
Eight times the perimeter of a square is 2,560 centimeters. How long is each side of the square, and what is its area?

At the mall, Jenna bought a shirt that cost \$20.10 before tax. After adding sales tax, she had to pay \$22.11. What is the sales tax rate as a percent?

Maria just sold a car she had bought 4 years ago. She sold it for 35% less than the original price she paid. The difference between the sale price and the price she paid is \$1,820. How much did she originally pay for the car?

**Name:**

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



Fill in the missing letters. Write oo or ea.

r\_\_\_\_\_ssure

aftern\_\_\_\_\_n

high sch\_\_\_\_\_l

d\_\_\_\_\_d

I \_\_\_\_\_se

m\_\_\_\_\_sure

app\_\_\_\_\_ring

cab\_\_\_\_\_se

1 lb = 16 oz

23 lb = \_\_\_\_\_ oz



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

Fill in the missing numbers. How? The sum of the four surrounding numbers is in the center of each square.

Exactly one of the four numbers has to be one of these numbers:  $7\frac{1}{2}$ ,  $9\frac{5}{9}$ , or  $6\frac{4}{9}$ .

The other three numbers have to all be DIFFERENT and must be from these:  $5\frac{1}{2}$ ,  $1\frac{1}{2}$ ,  $3\frac{1}{2}$ , or  $2\frac{1}{2}$ .

	$1\frac{1}{2}$		$9\frac{5}{9}$		$3\frac{1}{2}$		$2\frac{1}{2}$	
$3\frac{1}{2}$	$16\frac{17}{18}$	$5\frac{1}{2}$	$21\frac{1}{18}$	$2\frac{1}{2}$	15	$1\frac{1}{2}$	$17\frac{1}{18}$	$3\frac{1}{2}$
	$6\frac{4}{9}$		$3\frac{1}{2}$		$7\frac{1}{2}$		$9\frac{5}{9}$	
$1\frac{1}{2}$	$15\frac{17}{18}$	$2\frac{1}{2}$	$17\frac{1}{18}$	$1\frac{1}{2}$	18	$5\frac{1}{2}$	$19\frac{1}{18}$	$1\frac{1}{2}$
	$5\frac{1}{2}$		$9\frac{5}{9}$		$3\frac{1}{2}$		$2\frac{1}{2}$	
$1\frac{1}{2}$	17	$2\frac{1}{2}$		$1\frac{1}{2}$	18	$5\frac{1}{2}$	$17\frac{17}{18}$	$6\frac{4}{9}$
	$7\frac{1}{2}$		$5\frac{1}{2}$		$7\frac{1}{2}$		$3\frac{1}{2}$	
$3\frac{1}{2}$	15	$1\frac{1}{2}$	$19\frac{1}{18}$	$2\frac{1}{2}$	17	$5\frac{1}{2}$	$17\frac{17}{18}$	$6\frac{4}{9}$
	$2\frac{1}{2}$		$9\frac{5}{9}$		$1\frac{1}{2}$		$2\frac{1}{2}$	
$7\frac{1}{2}$	19	$5\frac{1}{2}$	$21\frac{1}{18}$	$2\frac{1}{2}$		$5\frac{1}{2}$		$1\frac{1}{2}$
	$3\frac{1}{2}$		$3\frac{1}{2}$		$6\frac{4}{9}$		$9\frac{5}{9}$	

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

Change  $\frac{3}{6}$  to a decimal.

Change 0.57 to a percent.

Change to percents.

$$\frac{30}{100} =$$

$$\frac{55}{100} =$$

$$\frac{81}{100} =$$

$$\frac{7}{10} =$$

$$\frac{25}{100} =$$

$$\frac{1}{10} =$$

Change 20% to a decimal and a fraction expressed in its lowest terms.

Find 5% of 218.

Find 59% of 324.

63 is what percent of 126?

Change  $\frac{7}{10}$  to a percent.

Find 20% of 195.

☐

I did page 26

☐I decided to skip this page  
edHelper

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

Get a fidget spinner! Spin it.

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

$$|-10| + v = 2$$

$$v =$$

$$692 \div 10$$

$$12 + 9 - 1 + 7 - 6$$

$$8.4972 \times 10^4 =$$

$$y = x + 16$$

$$y = 25$$

What is the value of x?

$$8 + 9 \times 3 + 3$$

K, I, J, H, I, G, H, F,

\_\_\_\_\_, E

$$5 \times 5 \times 5 = Z^y$$

What is the value of Z  
and y?

$$8 - 36 \div 12$$

28, 36, 44, 55, \_\_\_\_\_, 80,

94, 111, 128, 148, 168, 191,

214, 240, 266, 295

Rewrite as an algebraic  
expression or equation.Thirteen subtracted from a  
number is fifty-one.Rewrite  $\frac{17}{50}$  as a decimal.

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

Which of these is the greatest?

- A) forty-nine hundredths
- B) three hundred twenty-one thousandths
- C) twenty-four tenths
- D) one and nine tenths

What is the value of the 6 in 0.67258401?

- A) 6 tenths
- B) 6 hundredths
- C) 6 ones

32 inches is

- A) more than 2 yards
- B) equal to 1 yard
- C) more than 4 feet
- D) less than 2 yards

How many numbers are evenly divisible by six between 36 and 55?

- A) 15
- B) 11
- C) 3
- D)  $9^5 \cdot 9$

What is the greatest common factor of 42 and 21?

- A) 7
- B) 21
- C) 3
- D) 6

45 is what percent of 100?

- A) 45%
- B) 15%
- C) 20%
- D) 80%

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

	x	+	=	
+	B	C	C	78
+	C	A	C	66
=	C	?	C	42
	24	22	18	

### Equations and Hints:

Each letter is a whole number.

Fill in the equations using the chart:

$$B \times C + C = 78 \quad C + \underline{\quad} + C = 18 \quad \underline{\quad} \times \underline{\quad} + \underline{\quad} = 66$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = 24$$

Additional hints:

$$B = C + 6 \quad A < 20$$

### Show Work:

### Solve:

$$? = \underline{\quad}$$

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

Mackenzie has \$3.04 in pennies and nickels. Mackenzie has eight more nickels than pennies. How many of each coin does she have?

Kylie has six times as many dimes as pennies and five times as many nickels as pennies. Kylie has a total of one hundred forty-four pennies, nickels, and dimes. The total value of the coins is \$10.32. How many of each coin does she have?

Thomas has a total of two hundred forty-eight coins. He has four times as many nickels as quarters and one-third as many quarters as dimes. How much money does he have?

Cameron took a certain number of dimes from Brian. He then gave Brian the same number of quarters in return. Cameron had \$2.10 more than he had before the exchange. What was the number of quarters that Cameron gave Brian?

Steven's quarters and nickels total \$10.75. If the quarters were replaced by pennies then he would have \$3.79. How many of each coin does he have?

The value of a mix of Joshua's quarters and nickels is \$6.25. If the quarters were replaced by pennies, the value would be \$1.21. How many of each coin does he have?

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

In the Megalopolis stadium there were 30 sections, and each section could seat 600 people. How many people could the stadium seat?

Hunter bought a pack of 5 Do-Ba-Hoo game cards for \$2.55. What was the cost of each individual card? Round your answer to the nearest cent.

Write an equation to represent this situation, and then solve it: A submarine rose 66 meters to a depth of 281 meters. What was its depth before rising?

Wendy has five skirts and five shirts. How many different combinations of shirts and skirts can she create using these two sets of clothes?

The Bigtown Auto Shop could fix an average of about 87 cars in a six-day workweek. How many cars could it fix on an average day?

Mr. Bloop usually buys one cup of coffee on his way to work in the morning. For a five-day work week he spends \$11.75 on coffee. How much would he spend if he bought 8 cups at the same per cup price?

If  $h = -8$  and  $z = 41$  then what is the value of  $j$ ?  
 $9h + 9z - 4z = j$

If  $g = 9$  and  $z = -37$  then what is the value of  $d$ ?  
 $6g + 9z - 3z = d$

$4 + 84 \div 7 - 36 \div 6 =$

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

2,311 and 9,411 added to the difference between 418 and half of a number is 12,054. What is the number?

Fifteen exceeds one-seventh of a number by 10. What is the number?

6,000 and 600,000 added to five-sixths of a number equals 854,100. What is the number?

One-eighth of a number, increased by 48 is 54. What is the number?

Four times a number is  $20\frac{1}{2}$ . What is the number?

Forty-three less than five-sixths of a number equals 32. What is the number?



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

The sum of a number and  $\frac{2}{3}$  is  $1\frac{1}{6}$ . What is the number?

The sum of a number and  $8\frac{1}{2}$  is 20. What is the number?

If nine is added sixteen times to a number, the result is 215. What is the number?

Two-thirds of a number equals 748. What is the number?

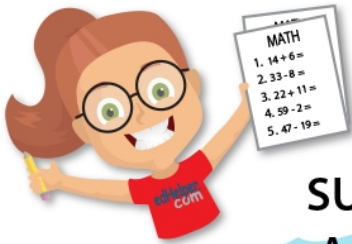
The sum of negative twenty-two and forty-six is two more than a number. What is the number?

Five-sixths of a number equals 200. What is the number?

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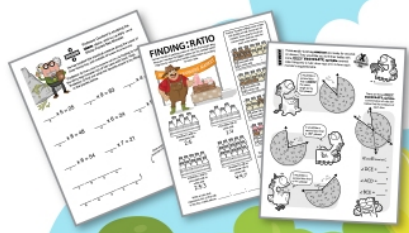


**MATH**  
1.  $14 + 6 =$   
2.  $33 - 8 =$   
3.  $22 + 11 =$   
4.  $59 - 2 =$   
5.  $47 - 19 =$



**ANSWER KEY**  
1.  $14 + 6 = 20$   
2.  $33 - 8 = 25$   
3.  $22 + 11 = 33$   
4.  $59 - 2 = 57$   
5.  $47 - 19 = 28$

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