Name:

Sally is working on her own cartoon using a new type of app. The main characters are zoinks. Some of the zoinks have two arms, some have three arms, and some have no arms at all!
There are a total of 40 zoinks in the cartoon, and 4 out of 5 zoinks have three arms. How many zoinks have three arms?

How many zoinks have no arms?

Don't cry if you can't figure this all out. Just write what you think and maybe your teacher will understand! Can you believe sometimes math problems may not have all the information? Wow!

Name:


$$
\begin{aligned}
& 201 \div-=67 \quad \div \div 64=4 \\
& 192 \div-=96 \quad \div \div=25
\end{aligned}
$$

$$
576 \div ـ=8
$$

$$
\ldots \div 67=5
$$

$$
\underline{-} \div 5=26 \quad 80 \div 工=10
$$

$6 \longdiv { 4 0 2 }$
$2 4 \longdiv { 9 6 }$
$8 \longdiv { 7 6 0 }$

$8 \longdiv { 3 2 }$
$6 \longdiv { 4 8 }$
$5 \longdiv { 2 0 }$
$3 \longdiv { 9 }$
$4 \longdiv { 2 8 }$
$2 \longdiv { 8 }$
$4 \longdiv { 3 6 }$
$8 \longdiv { 2 4 }$

$$
36 \div \_=6
$$

$$
\ldots \div 6=3
$$

$$
21 \div \ldots=3
$$

$$
\ldots \div 7=5
$$

$$
35 \div \ldots=7
$$

$$
88 \div \ldots=8
$$

$$
\div 2=2
$$

$$
\ldots \div 11=6
$$

$$
\ldots \div 2=9
$$

$$
81 \div \ldots=9
$$

$$
77 \div \ldots=11
$$

$$
\ldots \div 10=11
$$

$7 \longdiv { 6 3 }$
$7 \longdiv { 2 8 }$
$9 \longdiv { 5 4 }$
7) 42

Megan's favorite dessert is lemon meringue pie. Lemon meringue pie contains three hundred ninety-four calories per slice. Megan wanted to make the pie a bit lighter and healthier. She found out she could cut the calories by twenty-three percent if she used $2 \%$ reduced fat milk instead of whole milk. If she makes the lemon meringue pie with $2 \%$ reduced fat milk, how many calories will be in each slice of her pie?

Oops! It was No Housework Day. That meant Ava had to make her own breakfast. She didn't know how to cook, so she got her mother's recipe book. She would make biscuits. "Let's see," she thought. I need a third of a cup of milk. That will make 8 biscuits, but I want to make 20 biscuits. How much mik do I need?" How much milk does Ava need to make 20 biscuits?

Jessica likes to run. She started using a running app on her phone in May. During the month, she ran an average of 1.2 miles per day. How many miles did she run for the entire month?

What number is 542 less
Find the sum of 11,19 , and 50.

88
$\begin{array}{r}+42 \\ \hline\end{array}$

Name:


Pick the family fact that is missing.
$17 \times 9=153$
$9 \times 17=153$
$153 \div 9=17$

190, $\qquad$ , 210, 220, 230,

240, 250, 260, 270, 280

It was 89 degrees outside. What would the temperature be if it got 17 degrees colder?

Name:
$110,121,132, \ldots, 154$,
165,176

A book has 3 pages. Each page has 10 dimes. How many dimes in the book?

Which of the following is the greatest possible 2-digit number with all different digits?

Is 29 a composite or a prime number?

What number is halfway between 0 and 8 ?

Erin has 23 nickels. How much money is that?

Change $\frac{1}{2}$ to a decimal.

Sketch 2 lines $\overleftrightarrow{B C}$ and $\overleftrightarrow{S T}$ that are perpendicular.


$$
15+\frac{2}{3}-\frac{1}{4}=
$$

$$
4+\frac{1}{4}-\frac{1}{7}=
$$

$$
3+\frac{1}{6}+\frac{3}{5}=
$$

Name:
Sketch an acute angle
named $\angle E F G$.
Sketch an obtuse angle
named $\angle B C D$.

SkEFGG a right angle named

| 3,731 |
| :---: |
| $\times \quad 2$ |

Multiply 628 and 7.

60
$\begin{array}{r}15 \\ \hline\end{array}$

How many centimeters in 950.9 meters?

12, 14, 16, 18, 20, 22, 24 ,
26, $\qquad$ 30

What is the number that is 9 less than 3?

Name: $\qquad$
Use mental math to quickly solve.


Name: $\qquad$

This puzzle has a large number in the middle, which is the sum of the four numbers that surround it.


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: 4 tens, 2 tens, or 3 tens. The other three numbers have to all be DIFFERENT and must be from these: 5 tenths, 7 tenths, 1 hundredth, or 6 tenths.


Name: $\qquad$
Find 2 equations hidden in each box. Good luck!

3

$$
2-1
$$

$$
5-3
$$

$$
7
$$

$$
2-2 \quad 8-1
$$

Write 2 equations:

| 4148 | 5742 | $842+6264$ |
| :---: | :---: | :---: |
| $892+1669$ |  |  |
| $929+6336$ | 2559 | $168+7455$ |
| $1882+677$ | 10138 | 7265 |
| 1007 <br> Write 2 equations: |  | 2361 |

$8 \times 3$
$6 \times 9$
$2 \times 3$
816
$\begin{array}{ll}4 & 1 \times 2 \\ & 20\end{array}$
$7 \times 4$
$8 \times 9$
10

Write 2 equations:

ACROSS

1. the hundreds in 2 -Across + the ones in 12-Across + the tens in 8-Down + the thousands in 5-Across
2. the tens in 13-Down + the thousands in 8-Across + the hundreds in 8-Down
3. the ones in 13-Down + the hundred thousands in 9-Down + the hundreds in 3-Down + the tens in 8-Across
4. the ones in 4 -Across + the thousands in 8-Across + the tens in 2-Across
5. two thousand, two hundred twenty-three
6. the thousands in 8-Across + the ones in 13-Down + the hundreds in 8 -Down + the tens in 12-Across
7. the hundreds in 8-Down + the ones in 13-Down + the tens in 8-Across
8. the ones in 11-Across + the hundreds in 2-Across + the tens in 12-Across

## DOWN

3. the ones in 13-Down + the tens in 8-Across + the hundreds in 9-Down
4. the hundred thousands in 8-Down + the tens in 4 -Across + the hundreds in 3-Down
5. the hundreds in 12-Across + the ones in 13-Down + the tens in 5-Down + the hundred thousands in 9-Down
6. one million, one hundred nine thousand, three hundred ninety-nine
7. two hundred sixty-eight thousand, five hundred fifty
8. the tens in 8-Across + the ones in 11-Across + the hundred thousands in 8-Down + the hundreds in 12-Across
9. the ones in 11-Across + the thousands in 8-Across + the tens in 2-Across + the hundred thousands in 4-Across
10. $7+16$


Name: $\qquad$

b $(4,1)$
$\qquad$
$\qquad$
$\qquad$ k $\qquad$
h $\qquad$
$\qquad$


Plot $s$ at $(2,0) . \quad$ Plot $u$ at $(4,8)$.
Plot d at (2, 2).
Plot n at $(7,0)$.
Plot f at $(3,8)$.
Plot $\dagger$ at $(2,5)$.
Plot wat $(1,8)$. Plot b at (4, 4).


The equation $y=9 x$ is drawn.

What is the value of $y$ if $x$ is 1 ? $\qquad$
What is the value of $y$ if $x$ is 3 ? $\qquad$
What is the value of $y$ if $x$ is $2.5 ?$ $\qquad$

Name: $\qquad$


## Equations and Hints:

Each letter is a whole number.
Fill in the equations using the chart:

$$
\begin{aligned}
& C+A=33 \quad B+C=-\quad+{ }^{+}+\ldots=51 \\
& +_{+}^{+}+\ldots=46
\end{aligned}
$$

Additional hints:

$$
A=B+5 \quad A<31
$$

Show Work:
? =

Name: $\qquad$
Complete each pattern, using the same rule. Write what the rule is.

> 4, 24, 27, 162, 165, 990,
$\qquad$

7, 42, 45, 270, 273, 1638, 1641, $\qquad$

2, $\qquad$ 558

Complete each pattern. Write what the rule is for each pattern.

$$
\begin{aligned}
& \frac{1}{6561}, \frac{1}{729}, \frac{1}{81}, \frac{1}{9}, \\
& \text { (1), (9), (81), (729), } \\
& \quad(6,561),
\end{aligned}
$$

$\frac{1}{36}, \frac{1}{6},(1)$,
(6), (36), (216),
$(1,296)$,

Name: $\qquad$
Complete each pattern, using the same rule. Write what the rule is.


Complete each pattern. Write what the rule is.

$$
19,28,39,52,67, \ldots \quad 124,147,172
$$

$32,41,52,65,80,97, \ldots, \ldots, \quad 212,241,272,305$
$48,57,68,81,96$, 153, 176, 201, 228, 288

Name: $\qquad$
Robot Wendy likes to be tricked. Show at least 5 different ways to make 5,800 . One of your ways should be WRONG to trick Robot Wendy.

Weather person Sarah was at it again. She promised to stay awake for as long as the sun was out. She woke up with the rise of the sun at $5: 10$ arm. The sun will set in 15 hours and 13 minutes. What time will Sarah go to bed?

Fill in the following using the rule 2 cups $=1$ pint.
$8 \_+8 \ldots=8$ $\qquad$

$$
12 \text { cups }+12 \text { cups }=
$$

$$
\ldots \text { cups }+\ldots \text { cups }=6 \text { pints }
$$

Name: $\qquad$
Find the missing numbers. These both have the same rule. What is the rule?
If If
$1,1=2$ $7,7=14$
$2,2=4$
$8,8=16$
$3,3=6$
$9,9=18$
$4,4=8$
Then
$6,6=$ ?
$10,10=20$
Then
$15,15=$ ?
Hint: The answer is NOT 10.

Complete each pattern. Write what the rule is. Hint: Look at movement of digits!

44656, 64465, 56446, 65644, $\qquad$ , 64465,

56446, 65644, 46564, 44656, 64465, 56446, 65644

86819, 98681, 19868, 81986, $\qquad$ 98681,
$\qquad$ 81986, 68198, 86819, 98681, 19868, 81986



Name: $\qquad$

$\square$ True
$\square$ False

$\square$ True


True

$\square$ True

$\square$ True
Did you find that two are true? If not, look again! You should only mark TRUE if you are absolutely sure it is correct!

Name: $\qquad$


Did you find that one is true? If not, look again! You should only mark TRUE if you are absolutely sure it is correct!
$11 \times 8 \div 4$

Yummy Donuts gave two dozen chocolate donuts and four dozen jelly donuts to the school. How many donuts did they give?

Round 54,267 to the nearest hundred.

```
1 km = 1,000 m
6 km =
```

$\qquad$

Choose the word that best completes the sentence.
Mrs. Thompson has (two/to) sets of twins!

Name:

| What is the smallest prime |  |
| :--- | :--- |
| number greater than $20 ?$ |  |
| 11 |  |
| 22 | Circle all of the sums which <br> are odd. <br> 29 <br> 23 <br> 23 |

If today is Saturday, then what day was it 21 days ago?
Friday
Saturday
Wednesday
If $100 \mathrm{~cm}=1 \mathrm{~m}$, then which
of the following is equal to
18 m ?
1800 m
180 m
180 cm
1800 cm

Circle all of the following that are not whole numbers.

25-3
3-25
$25 \div 3$
$25+3$
$3 \times 25$
$25 \times 3$

Circle the equation with the largest value.
$4+3 \times 5$
$2+5 \times 9$
$3+3 \times 10$
$5+1 \times 4$


2 hundreds +3 tens +16 ones =
246
245
2316
253


If you add 8 to an even number, the new number must be
prime
odd
even

If you add 6 to an even number, the new number must be
odd
prime
even

11 hundreds +5 tens +7 ones =
1148
1162
1157
$40: 4=50:$ $\qquad$
4
6
12
5
Circle the equation with the largest value.
$4+1 \times 11$
$2+2 \times 7$
$3+2 \times 5$
$3+1 \times 4$

Name:

# Polygon Perimeters 

What is the distance of each polygon's perimeter?
$\qquad$ miles

edHelper.com/math_worksheets.htm

Name: $\qquad$


Right
1 right angle


Acute
3 acute angles


Obtuse
1 obtuse angle


Name:
$\frac{16}{25}=\frac{64}{100}=\square \%$
$\frac{11}{20}=\frac{}{100}=\square \%$
$\frac{4}{5}=\frac{10}{100}=\square \%$
$\frac{3}{4}=\frac{100}{100}=\square$
$\frac{23}{50}=\frac{100}{100}=\square$
$\square$

$$
\begin{aligned}
& \frac{58}{100}=\frac{29}{50}=\ldots \% \\
& \frac{22}{100}=\frac{}{50}=\ldots \% \\
& \frac{65}{100}=\frac{}{20}=\ldots \\
& \frac{46}{100}=\frac{}{50}=\ldots \\
& \frac{30}{100}=\frac{1}{10}=\ldots
\end{aligned}
$$

Wendy put posters on the wall in her room. The posters cover $\frac{3}{5}$ of the wall. What percent of the wall is covered with posters?

Name:

| Write as a percent. |
| :--- | :--- |
| $\frac{1}{2}$ |$\quad$| Write the ratio as a fraction. |
| :--- |
| 7 to 6 |

Change to a decimal. 86\%
$\square$ $9 y=27$

$$
\frac{N}{5}=6
$$

Reduce $\frac{9}{24}$ to its lowest terms.
$4+\frac{1}{5}+\frac{2}{7}=$
$10+\frac{5}{6}-\frac{3}{5}=$

Sketch 2 lines $\overleftrightarrow{I J}$ and $\overleftrightarrow{S T}$ that are parallel.

What kind of angle is this?
Change $\frac{4}{8}$ to a decimal.
$7 \longdiv { 5 8 . 8 }$

Name:
$34+-48=$

$$
-3-4-1=
$$

Find $33 \%$ of 362 .

Write as a decimal.
Thirteen and three tenths
Thirty-six hundredths

On a number line, what is the number that is 9 spaces right of -5 ?


Write as a decimal.
Eighty-two thousandths

## Rewrite 15 + - 11

$]^{-}-$

What is the sum of 17.3 and 9.6?

Name:
$\square$
$\square$
Amanda drew a large rectangle and then a little square. She wants to draw and color in little squares inside of the rectangle. Each time she draws a little square inside the rectangle, she will color it with a different color. She has a total of 192 different colored crayons. How many different colored small squares will she be able to fit in this rectangle?

| 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| 12 | 18 | 24 | 30 |
| 36 | 42 | 48 | 54 |
| 60 | 66 | 72 | 78 |
| 84 | 90 | 96 | 102 |

a. If this pattern continues, in which column would the number 138 be?
b. If this pattern continues, would the number 255 be in any of the columns? If so, which column?

Megan is going to meet up with her friend Anne at the mall. It's Anne's birthday, so Megan is planning on treating her to lunch and the movies.
a. Where do you think Megan should take Anne to lunch? Estimate how much lunch will cost.
b. How much do you think 2 movie tickets will cost? Remember you are just estimating!
c. How much money would you tell Megan to take out of the ATM so she has enough money for the mall?

Name:


Look at the balance. What does it tell you? Write a sentence to explain.


Did you find that two are true? If not, look again!
You should only mark TRUE if you are absolutely sure it is correct!
Write one synonym for this word. frequent
$22 \mathrm{~kg}=$ $\qquad$

Name:


What is the least common multiple of 3 and 11?




## What is the greatest common factor of 3 and 12?

Subtract 78 from 476.
Subtract 73 from 610.

Name:
Wendy wanted to be pretty. She spent a lot of time each day looking at herself in the mirror. Today she looked in the mirror from 3:22 p.m. until $4: 13$ p.m.! She spent $\frac{1}{2}$ of that time brushing her hair. How long did Wendy brush her hair?

Gavin has four quarters, three nickels, and one dime to buy chocolate ice cream. Write three different expressions that show the amount of money he has.

Pam has a new job working at Pizzeria Magpie. She loves it, but she can only work four hours on Monday, four hours on Tuesday, and nine hours on Saturday. The pizzeria will give her a check every two weeks. She will be paid $\$ 11.90$ per hour. How much will her first paycheck be?

Sketch an acute angle named $\angle \mathrm{FGH}$.

What kind of angle has a measure of $180^{\circ}$ ?

Sketch an obtuse angle named $\angle \mathrm{GHI}$.

Name:


How many minutes is it from 6:00 a.m. to 10:40 a.m.?

What is the area of a rectangle with sides 4 cm and 11 cm ?

Know how many inches in a foot? Okay, smarty pants, how many inches in 5 feet?

Round the decimal 0.375 to the nearest hundredth.

A rectangle is 45 cm on one side and 11 cm on another side. What is the perimeter?
$26+n=40$
What is the value of $n$ ?

Name:

The number 350 is the smallest whole number that when rounded to the nearest
$\qquad$ will be 400.

I am a 3-digit number greater than 900. My first and last digits are the same. Write any number that fits this.

The product of three consecutive numbers is 336 . What are the numbers?

Name:

| 65 | -8 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| $(3+4)+8=$ | $\begin{array}{r} 288 \\ +304 \\ \hline \end{array}$ | $\begin{array}{r} 85 \\ -\quad 67 \\ \hline \end{array}$ |
| :---: | :---: | :---: |

Name:


Circle the one at $\mathrm{C}, 2$.


Circle the one at $\mathrm{C}, 3$.



Name：

## Which street has a police station？

Which street has a library？
Go ___ to drive from the library at 32 Gull Avenue house at 35 Gull Avenue 国田
［Hint：Use north，south，west，or east．］

Write the total distance to go from the pet shop at 360 Reidcrest Street to the house at 100 Newbridge Street 酔獃．

The school at 33 Gull Avenue is across from

Newbridge Street is $\qquad$ of Reidcrest Street．

Turnbull Street is $\qquad$ of Newbridge Street．

Write the total distance to go from the house at 100 Newbridge Street 駰田 to the house at 103 Newbridge Street 四閪。

Write directions to get from the house at 280 Dale Street to the house at 282 Dale Street．

Begin at the house at 3 Croyden Way．Walk the path to the road．The distance from your starting point to the road（the little path）is 48 feet．Go south on Croyden Way．Your final destination is on the east side of Croyden Way．You will have walked a total of 96 feet from your starting point （including the 48 feet path at the end of your walk）．What is your final destination？

Name:


## Can you guess the word?

No duplicate letters can be used.
T H U M B

The letter T is in the word and is in the correct spot.

| W | R | I | S | T |
| :--- | :--- | :--- | :--- | :--- |

The letter R is in the word, but $R$ is not in that spot.

$$
A B C D E F G H I J K L
$$

## A list of letters will be given that have not been used. Good luck!

Hint: There are no duplicate letters in the answer.


BCDGHIJKLMPQUVXY Z

Let's check if you guessed correctly. Look diagonally to find the correct answer. (DIAGONAL!)

T S R OFAWNOFPAFFFX WRRXNE JHOERFEWRE T K W P R M A A A W S V P GBE HRWOOIOSWLNRENFN NW P DWW X W T F OO○ X O○ ENSOENE J NE E T I P K A WOAAWRERWFIOOOWH O○ T E P DQRWWR TWE E F

Hint: There are no duplicate letters in the answer.


B D F H I J K M N P Q U V W X Y Z


Let's check if you guessed correctly. Look across or down to find the correct answer.

ERERBSSOTTCXSRLUEHY HRTEAALSOEOOSSCEFFG STOLEECEEOXOHEEESSH EOS GCOLCEGNCHTEHVSO EJTHOSEERSOLGOFLSYX CCEOWDOOWTETRUVTDIT HHLVQEEWELESQHTSOEL HACTEGRACEESLSHZOTO

Hint: There are no duplicate letters in the answer.


Let's check if you guessed correctly. Look diagonally to find the correct answer. (DIAGONAL!)

EQMGQMREEMDRUYGEXUR
TGRISIRBRRCKBOOROGR GYEATRFEETYEAUCHEUE GRJGRAEEMTBEVTYETAT WTEEPRTAJITAEVHEERT TEARGOKMTHTZUGEARER

Name:
If you add 1 to an even
number, the new number
must be
odd
even
prime
If you add 7 to an even
number, the new number
must be
prime
even
odd

Which of the following is closest in value to 4073 ?
4,020
3,997
4,018
4,016


Circle the equation with the largest value.
$4+4 \times 7$
$3+1 \times 12$
$1+3 \times 10$
$5+2 \times 4$

| $\ldots: 5=42: 6$ | $\begin{aligned} & 5 \text { hundreds }+8 \text { tens }+17 \\ & \text { ones }= \end{aligned}$ |
| :---: | :---: |
| 3 | 597 |
| 4 | 687 |
| 35 | 5817 |
| 6 | 600 |

If you add 2 to an even number, the new number must be
even
prime
odd

5 hundreds +8 tens +17
ones =
597
687
5817
600

Which of the following is closest in value to 7072 ?
7,012
6,995
6,985
7,010

Circle the equation with the largest value.
$4+2 \times 4$
$3+4 \times 6$
$4+2 \times 6$
$2+2 \times 9$

Name:
Can you draw lines to cover every number or shape in the picture?
You can only move left, right, up, or down. And definitely no starting or stopping in a blank spot! The first one is already done for you. Good luck.

Draw exactly 8 lines.
Start on 1.
Do not pick up your pencil.


Draw exactly 6 lines.
Start on the square.
Do not pick up your pencil.


Draw exactly 9 lines.
Start on the square.
Do not pick up your pencil.


Name: $\qquad$

## Dr. Programmer typed:

## Team1=3

Team2=5
print ("Who won the soccer game?") if Team1 > Team2
print ("Team1 did")
if Team2 > Team1 print ("Team2 did")

## The computer replied:

Who won the sooccer game?

## Ieam2 did

Won_By = Team2 - Team1
if Won_By == 1
print ("They won by 1 goal.")
if Won_By > 1
print ("They won by ",Won_By," goals.")
left_at = "kitchen";
print ("Where is my phone?")
if (left_at == "kitchen")
print ("Maybe by the refrigerator?")
if (left_at == "car")
print ("It is still in the car!")

## I_e_ _-_n _- - <br> a <br> $\qquad$

```
Today_Is = "Tuesday"
if (Today_Is == "Monday")
    print ("soccer skills practice")
if (Today_Is == "Tuesday")
    print ("volleyball practice")
if (Today_Is == "Wednesday")
    print ("playdate?")
```

Name:
Complete each pattern. Write what the rule is.

| 105.4 | 110.8 | 116.2 |
| :--- | :--- | :--- |
| 121.6 |  | 132.4 |
| 137.8 | 143.2 |  |
| 154 | 159.4 |  |

Complete each pattern. Write what the rule is.

$$
\begin{gathered}
4,3 \frac{4}{5}, 3 \frac{3}{5}, 3 \frac{2}{5}, 3 \frac{1}{5}, \ldots 2 \frac{3}{5}, 2 \frac{2}{5}, \\
2 \frac{1}{5}, 2,1 \frac{4}{5}, 1 \frac{3}{5}, 1 \frac{2}{5}, 1 \frac{1}{5}, 1, \frac{4}{5}, \frac{3}{5} \\
\hline 3 \frac{2}{5}, 3 \frac{1}{5}, 3, \ldots, 2 \frac{3}{5}, 2 \frac{2}{5}, 2 \frac{1}{5}, 2,1 \frac{4}{5}, \\
, 1 \frac{2}{5}, 1 \frac{1}{5}, 1, \frac{4}{5}, \frac{3}{5}, \frac{2}{5}, \frac{1}{5} \\
\hline
\end{gathered}
$$

Subtract $\frac{1}{5}$

Hannah has 143 Zeemos, which are tiny hairy stuffed animals. To keep them from her younger siblings, she wants to put them away. Her desk has 5 drawers, and she can fit 27 into each drawer. How many will still need a home after she fills her desk drawers?

Gavin and Emma are playing bingo with their class. Their teacher put 53 numbers into a box and said that the box has 7 more even numbers than odd numbers. What is the ratio of the number of even numbers to the number of odd numbers in the box?

Jack used a gift card to purchase a custom baseball jersey. Unfortunately, he needs to wait. The seller said he should receive it in 2 to 4 weeks. If today is June 20, what would be the latest date that the package might arrive?

Name:

## $\begin{array}{lllll}72 & 14 & 63 & 56 & 35\end{array}$ $\begin{array}{lllll}91 & 40 & 29 & 88 & 87\end{array}$ $\begin{array}{lllll}59 & 68 & 72 & 91 & 44\end{array}$ $\begin{array}{lllll}33 & 15 & 26 & 17 & 70\end{array}$

What is the ratio of odd numbers to even numbers?

What is the ratio of numbers less than 52 to numbers 52 or greater?

Justin flipped a coin 20 times. He counted a total of 13 tails. What is the ratio of heads flipped to tails flipped?

Sarah got a hit in 6 of her 8 softball games. What is the ratio of games she went hitless to games she got a hit?

## Express each ratio in simplest form.

$$
12: 6=
$$

27:9 =

60:15 = 70:14 =

72:8 = 78:13 =


What is the ratio of numbers divisible by 5 to those numbers not divisible by 5 ?

What is the ratio of numbers divisible by 8 to those numbers not divisible by 8 ?

Name: $\qquad$
Complete each pattern, using the same rule. Write what the rule is.

$$
\begin{gathered}
9,9,4,4,4,4,9,9,9,9,9,4,4,4, \\
4,9,9,9,9,9,9,9,9,4,-\longrightarrow,--
\end{gathered}
$$

$5,5,3,3,3,3,5,5,5,5,5,3,3,3$,
$3,5,5,5,5,5,5,5,5,3,3$, $\qquad$
$\qquad$
$\qquad$

Complete each pattern. Write what the rule is.

52514, 25145, $\qquad$ , $\qquad$ 45251, 52514, 25145,

51452, 14525, 45251, 52514, 25145, 51452, 14525

22732, 27322, 73222, 32227, 22273, 22732, 27322,
73222, 32227, 22273, $\qquad$
$\qquad$ 73222,

Name: $\qquad$
Emily likes to multiply a number by itself. Why? Nobody knows!
"If I take my favorite number and multiply it by itself, the product will be only 19 away from
83. Can you guess my favorite number?" asks Emily.

The Zippy Zoo is special.
"Why?" asks Sally.
"Just look!" yells her brother.
It is obviously special because all they have are zebras. A total of 120 of them! The cool part is that 2 out of every 10 zebras at Zippy Zoo are not real zebras. They are robots.
"Wow," says Sally. "How many robot zebras are there?"
triple $70=$


How many total legs are on 2 zebras and 3 ants?

Name:
Mary lives in Havana where it is currently Sat. at 12:15 p.m. She made a phone call to Megan who lives in Perth. It is $1: 15$ a.m. and Sun. in Perth. What is the difference in time?

I am a whole number. When rounded to the nearest ten, the answer is 140. The sum of my digits is 11 . What number am I?

Use any of these digits. Cross off a digit after you use it. You do not need to use all of the numbers.
2 1
3
2

Use the digits to make a 2-digit minus 2-digit subtraction equation. The difference between your numbers should be 21 .

Name:

## Patterns

Dr. Programmer typed:
\# Trying to make a pattern.
\# Does this work?
$A=9$
$B=4$
$C=A+B$
$D=C+B$
$E=D+B$
print ("This pattern counts by ", B)
print ("The pattern is ",A,", ",B,", ",C);

## The computer replied:

This pattern
counts $\underline{b} \neq \underline{4}$
The pattern is 9

- $4-1 \underline{3}$
$A=6$
$B=3$
$C=A+B$
$D=C+B$
$E=D+B$
print ("This pattern counts by ", B)
print ("The pattern is ",A,", ",B,", ",C);
$A=7$
$B=3$
$C=A+B$
$D=C+B$
$E=D+B$
print ("The pattern is ".,A,", ",B,", ",C);
$A=7$
$B=2$
$C=A+B$
$D=C+B$
$E=D+B$
print ("The pattern is ",A,", ",B,", ",C);


## The pattern is 7 . 3 - 10

$A=8$
$B=2$
$C=A+B$
$D=C+B$
$E=D+B$
print ("The pattern is ",A,", ",B,", ",C);

## I__ _-_-_-n _- 8 _

ADDTO $=2$
STARTNUM = 8
NUM2 $=$ STARTNUM + ADDTO
14
NUM3 = NUM2 + ADDTO
NUM4 = NUM3 + ADDTO
print (STARTNUM,", ",NUM2,", ",NUM3,", ",NUM4)

## $8-10-12$ -


STARTNUM $=6$
NUM2 $=$ STARTNUM + ADDTO
NUM3 = NUM2 + ADDTO
NUM4 = NUM3 + ADDTO
print (STARTNUM,", ",NUM2,", ",NUM3,", ",NUM4)

ADDTO $=4$
STARTNUM = 8
NUM2 = STARTNUM + ADDTO
NUM3 = NUM2 + ADDTO
NUM4 $=$ NUM3 + ADDTO
print (STARTNUM,", ",NUM2,", ",NUM3,", ",NUM4)

$1+7 \times 10$

Name: $\qquad$

This puzzle has a large number in the middle, which is the sum of the four numbers that surround it.

$$
3 \frac{1}{3}+2+2 \frac{1}{4}+5 \frac{2}{3} \quad 12+6 \frac{1}{3}+2+3 \frac{1}{3}
$$



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: $8 \frac{2}{3}, 6 \frac{1}{3}$, or $2 \frac{1}{4}$. The other three numbers have to all be DIFFERENT and must be from these: $5 \frac{2}{3}$, 12,2 , or $3 \frac{1}{3}$


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: $7 \frac{1}{2}, 7 \frac{7}{9}$, or $8 \frac{8}{9}$. The other three numbers have to all be DIFFERENT and must be from these: $6,9 \frac{1}{2}, 2 \frac{1}{2}$, or 3 .


Name:


Reduce $\frac{12}{24}$ to its lowest terms.

$1-\frac{4}{11}=$

$$
17+\frac{3}{5}+\frac{1}{12}=
$$

$$
16-\frac{1}{2}+\frac{1}{5}=
$$

Change $\frac{45}{27}$ to a mixed number.

$$
8+\frac{7}{8}-\frac{2}{5}=
$$

Write the reciprocal. $\frac{7}{9}$
$15+\frac{1}{2}-\frac{3}{7}=$

Name:
$240 \div 4=$
A) 176 R 2
B) 6050
C) 60
D) 10

If you wanted to estimate the difference of 52 and 26, what would your answer be (round by tens)?
A) 19
B) 21
C) 10
D) 20

Which of the following numbers will have a remainder when it is divided by 9 ?
A) 54
B) 81
C) 73
D) 45

Which of the following has the smallest value?
A) 0.12
B) 0.02
C) $A$ and $B$ are equal.

Which of the following has the smallest value?
A) 34
B) 0.34
C) $A$ and $B$ are equal.

Which of the following has the greatest value?
A) 0.219000
B) 0.219
C) $A$ and $B$ are equal.

Name: $\qquad$
\% J गनo
Supplementary Angles


List all of the ACUTE angles on the page.


Draw and label a $90^{\circ}$ line at point $V$.


Name:

Nathan tried to measure his resting heart rate. His heart beat a total of 28 times in 24 seconds. Anne measured hers. She counted a heartbeat of 107 in 150 seconds.
Well-trained athletes tend to have resting heart rates that can be as slow as 40 beats per minute. Would you guess that Nathan or Anne was a well-trained athlete?

## Emily and David like to ride their

 electric scooters on the weekend.Emily rode a total of 156 miles this weekend, and her average speed was 26 miles per hour.

David rode a total of 315 miles this weekend, and his average speed was 35 miles per hour.

Which rider rode for the longest amount of time?

Holly and Amy each want to buy $\$ 102$ rugs for their rooms. Who will be able to buy it first?

Holly has $\$ 28$ saved. She earns $\$ 12$ each week and plans to save it all for the rug.

Amy has $\$ 35$ saved. She earns $\$ 7$ each week and plans to save it all for the rug.

Amanda and two of her friends are playing a game where they can spend HBucks to buy extra lives and potions. Who spent the most HBucks? To purchase 2 extra lives costs 8 HBucks.
To purchase 5 potions costs 3 HBucks.
Amanda bought 10 extra lives.
Hannah bought 10 extra lives and 10 potions.

April bought 4 extra lives and 15 potions.

Name: $\qquad$
The block above is the sum of the two blocks below. Fill in the missing blocks.


| How many feet are in 108 inches? |  |  |
| :--- | ---: | ---: |
| feet | 766 <br> -476 | 39 <br> -26 |

Name:
Write as a decimal.
$4 \frac{727}{1000}$
Write as a decimal.
$7 \frac{3}{100}$

Write as a decimal. Four tenths

| Write the decimal in words. |
| :--- |
| 35.1 |
|  |

Use >, <, or $=$ to complete.
$9.8 \_10.3$
$7.6 \ldots 7.1$

| $8.4 \ldots 8.9$ |
| :---: |
| $0.8 \ldots 0.78$ |
| $5.1 \_4.8$ |
| $9.51 \_9.04$ |
| $8.7 \ldots 8.3$ |

Write as a decimal. Seventy-two thousandths


> Change $\frac{1}{2}$ to a decimal.
0.4
0.8
$+0.5$

Change $\frac{9}{10}$ to a decimal.

Name: $\qquad$


## Equations and Hints:

Each letter is a whole number.
Fill in the equations using the chart:

$$
\begin{aligned}
& A \times A+C=859 \quad L_{+}+A+A=76 \\
& A_{\ldots}+\ldots=137 \quad \__{+}+\ldots=53
\end{aligned}
$$

Additional hints:

$$
C=B+12 \quad C>10
$$

Show Work:
? =

Name: $\qquad$
Complete each pattern. Write what the rule is.

| $4 \frac{1}{4}, 4,3 \frac{3}{4}, 3 \frac{1}{2}, 3 \frac{1}{4}, 3,2 \frac{3}{4}, 2 \frac{1}{2}$, <br> $2,1 \frac{3}{4}, 1 \frac{1}{2}, 1 \frac{1}{4}, 1, \frac{3}{4}, \frac{1}{2}, \frac{1}{4}$ <br> $4 \frac{1}{2}, 4 \frac{1}{4}, 4,3 \frac{3}{4}, \ldots, 3,2 \frac{3}{4}$, <br> ,, 2,$1 \frac{3}{4}, 1 \frac{1}{2}, 1 \frac{1}{4}, 1, \frac{3}{4}$ |
| :---: |

Subtract $\frac{1}{4}$

Complete each pattern. Write what the rule is.

| 4 | 24 | 144 | 864 | 5,184 | 31,104 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 64 | 512 | 4,096 | 32,768 |
| 5 | 35 |  | 1,715 | 12,005 | 84,035 |
| 2 | 18 |  | 1,458 |  | 118,098 |

Name: $\qquad$
Mental Math
If Start with the area of a square that has a length of 9 .

81

I\& Add the digits in your number. The sum of that is your new number.

1367564931 (Circle your answer to double check you are correct.)
\& Multiply by 3 .
2799123522
If Add 13.
6407805110
\& Divide by 10 .
2648547781
\& Multiply by 5 .
9747203361

Mental Math

- Start with the number 551.
$\begin{array}{lllllll}6 & 3 & 5 & 1 & 5 & 7 & 6 \\ \text { (Circle your answer to double check you are correct.) }\end{array}$
- Add one-fourth of a dozen.

5515548930


- Add the number of cups in 3 quarts.

3876805662

- Add half of 52.

5924932919

- Round to the nearest ten.

7835590998

- Add the number of inches in 3 feet.

8656261541

Name: $\qquad$

Get a fidget spinner! Spin it.


Name: $\qquad$

Spin again.
I needed to spin $\qquad$ time (s) to finish.
Find the GCF using the Birthday Cake method.




