Name:
Change $\frac{1}{10}$ to a
decimal.

Find 50\% of 168.
Find $4 \%$ of 40 .

Change 35\% to a decimal and a fraction expressed in its lowest terms.

Change $15 \%$ to a decimal.

Find $66 \%$ of 249.

Change 0.47 to a percent.

Name: $\qquad$

ACROSS
2. 15-Across plus 16-Down
5. Four times 12-Down
6. Five more than 10-Across
10. Two less than 6-Down
13. Four times 4-Down
14. One-fourth of 6-Down
15. One-sixth of 5-Down
17. Nine times 9-Down
18. Nine more than 9-Down
19. Four more than 12-Down
20. One-fifth of 19-Across

## DOWN

1. One-eighth of 8-Down
2. Seven less than 5-Down
3. Six less than 14-Across
4. 10-Across plus 6-Down
5. Nickels in eleven dollars
6. Three less than 10-Across
7. 10-Across plus 5-Down
8. Five more than 19-Across
9. One-seventh of 4-Down
10. One-fifth of 14 -Across
11. One-fifth of 17-Across


Fill in the missing letters. Write ou or ue.
di
f
$14 \mathrm{~cm}=$ $\qquad$ mm

A wooden chest containing 80 bags of Stash tea can be purchased for $\$ 45$. The same chest with 80 bags of Taylors of Harrogate tea bags sells for $\$ 58.72$. An empty chest costs $\$ 26.95$. What is the difference in the per bag price of the two tea brands?

Mr. Garcia, our teacher, rides his bicycle to school every day. It is 1.6 miles from his house to school. Write as a mixed number in lowest terms the total distance he rides getting to and from school each day.

Rewrite these numbers in order from least to greatest.

$$
\begin{array}{lllll}
-7.6981 & -7.091 & -6.06 & -7 & -6
\end{array}
$$

Hannah and Ava have a secret way of sending numbers to each other. Hannah drew a $y$-axis on the left of the paper and an $x$-axis on the bottom. Hannah plotted these points and wrote B (for the bottom number). Ava then found the secret coordinate. Draw a small grid to see if you can figure out the secret coordinate.

The points are (17, 12), (10, 6), (6, 9), and (8, 4).

Name:

## What number multiplied by -11 results in a product of -99 ?

Write the number that when multiplied by 12 is -48 .

What is the area of a rectangle with sides 3 cm and 6 cm ?

Round 84,475 to the nearest hundred.
$\square$

The diameter of a circle is $1,278 \mathrm{~cm}$. What is the radius of this circle?

What is $50 \%$ of $268 ?$

How many centimeters in 870.4 meters?

| $33 \div 3=\ldots$ | $2 \times 8=\ldots$ |
| :--- | :--- | :--- |

Name:
Give two answers for $x$ in each equation.

$$
\begin{aligned}
& |x+12|=5 \\
& |9-x|=2
\end{aligned}
$$



Change to a fraction.
$9 \%$

It was 2 degrees above zero in the morning. By afternoon the temperature rose 15 degrees. How warm was it?

Round the decimal 0.565 to the nearest hundredth.

Write as a percent. $\frac{2}{15}$
$(117,649)$, $\qquad$
$(2,401),(343),(49)$,
(7), (1) , $\frac{1}{7}, \frac{1}{49}, \frac{1}{343}$
$1 \mathrm{lb}=16 \mathrm{oz}$
$14 \mathrm{lb}=$ $\qquad$ oz

Circle the smallest number:
234,908,175 28,096
415,673 3,145,820,679

Name:

| Erin bought three <br> packages of Jell-O to <br> use in a molded fruit <br> salad. Each package <br> cost $\$ 0.92$. She also <br> bought two cans of <br> mixed fruit for $\$ 1.12$ per <br> can and some whipped <br> topping for \$1.57. What <br> was the total cost of her <br> purchases? | Maria is almost finished <br> with her homework. She <br> is going to reward <br> herself with a <br> strawberry parfait when <br> she finishes. This is her <br> last question: "What is <br> the prime factorization <br> of 66?" Answer the <br> question for her. | Wendy wanted to make <br> a chart illustrating the <br> effects of static <br> electricity. She used a <br> sheet of poster board <br> that was 18 inches wide <br> and 36 inches long. She <br> divided the poster <br> board into six equal <br> sections. What was the <br> area of each section? |
| :--- | :--- | :--- |



Name:

## Sudoku Sums of 16

Each row, column, and box must have the numbers 1 through 9. Hint: Look for sudoku sums. The sum of the two boxes inside of the dashed lines is 16 .

Here is an example of a sudoku sum of 16 :


| 3 | 5 | 8 |  |  | 7 |  | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 |  |  |  |  |  |  | 3 |
|  |  |  | 6 | 3 | 8 | 9 |  |
|  |  |  | 3 |  |  |  | 9 |
| 5 | 9 |  | 4 |  |  | 3 |  |
| 7 | 2 |  | 8 | 5 |  |  |  |
| 4 | 3 |  | 1 |  |  | 2 |  |
| 6 |  |  |  |  |  |  | 5 |
|  |  |  |  |  | 5 | 4 |  |


| $66 \div 6=$ | How many yards are in 18 feet? $\qquad$ yards | $12 \times 5=$ |
| :---: | :---: | :---: |
|  | Write 317,297 in words. |  |
| $7 \times 7=$ |  |  |

Name:

| In the number $36,851,847$, , the digit 6 is in <br> what place? | $25 \div 5=\ldots$ |  |
| :--- | :--- | :--- |
|  |  |  |

Circle the addition property for $39+58=58+39$.
associative property commutative property

Holly and Amy are playing a number game.
Holly says 6 . Amy replies that the answer is 36.
Holly says 1. Amy replies that the answer is 1 .
Holly says 7. Amy replies that the answer is 49.
Holly says 9 . Amy is thinking. What number should Amy reply with?
$10 \times 11=\square$


Name: $\qquad$

$$
\begin{array}{|l}
8 \bullet 7 \bullet 0 \bullet 3 \\
8 \bullet=
\end{array} \cdot 7 \bullet 3 \cdot 5 \bullet 9 \bullet 2 \bullet=\bullet=\bullet 5 \bullet 6 \bullet 1 \bullet \div \bullet 1
$$

Use the pieces above to help you fill in the runaway math puzzle.

$110 \div 10=\square$

Circle the digit in the hundredths place.
$\qquad$

Write an equation to represent this:
The product of eight and seven is fifty-six.

Name:
Daniel, Emma, Alexander, and Alexandra each completed their homework. One took forty-nine minutes, one took eighty minutes, one took seventy-eight minutes, and one took forty-six minutes to complete their homework.

How long did each person take to finish his or her homework?

1. Alexandra needed less than an hour to finish.
2. Daniel needed more time than Alexandra to finish.
3. Alexander started working at 2:31. Daniel started working sixteen minutes after Alexander and finished at 4:05.
4. Alexander needed more time than Alexandra to finish.
5. Alexander started working twenty-six minutes after Daniel and finished three minutes before Daniel.
6. Emma started on the assignment at 4:41 p.m. Emma took a forty-four minute break at 5:37 p.m. to eat dinner. Emma continued working after dinner and finished the assignment at 6:45 p.m.

Daniel took $\qquad$ to finish.

Emma took $\qquad$ to finish.

Alexander took $\qquad$ to finish.

Alexandra took $\qquad$ to finish.

$40 \div 5=$

David took three numbers greater than 1 and multiplied them. One number was five and the other number was eighteen. Of course, he forgot the last number, but he remembered the product was 271. Is this possible?
$12 \div 2=$ $\qquad$

Draw an irregular shape with no straight lines. The shape should have an area that is about 9.9 square units. Color in the shape.

Amy put all her money in a safe. She also wanted to keep a record of the money in the safe without writing the actual amount. So she wrote $x+2390=2792$. Now her little brother will never know the true amount!

Say you want to copy Amy. You have \$704 saved, but you don't want anyone to know. Make up an equation so that no one (but you and other math geniuses) will know.

Jenna is learning about programming using variables and loops. She loves programming, and her program printed out a pattern that started like this:
2531374349
She describes this pattern by saying she assigned the number 25 to a variable. Then she increases the variable by 6 each time and prints it out. She lets the program run some more.
a. What would the 10th number be?
b. What would the 30th number be?

a. Show where 20 should go.
b. Show where 45 should go.
c. Show where 37 should go.

Name:
$k+19=23$
$\mathrm{k}=$
$5+z=14$
z =

Write an algebraic expression to
subtract 97 from $r$.

The sum of 23 and $m$ is 41 .
What is the value of $m$ ?

$$
\begin{aligned}
& 13-y=9 \\
& y=
\end{aligned}
$$

$$
s-5=11
$$

$$
s=
$$

Write an algebraic expression to get the product of 7 and $z$.

The sum of 34 and k is 70 .
What is the value of k ?

Compare each pair of numbers or expressions using >, $=$, or <

$15 \div 5 \bigcirc 5 \div 15$

Simplify $9 y-3 y$.
What is the value of the simplified equation when $\mathrm{y}=6$ ?

What is $5 m+51$
when $\mathrm{m}=4$ ?

Simplify $3 r+9 r$.

What is the value of the simplified equation when $r=2$ ?

Name:
Subtract 53 from 694.

$1 7 \longdiv { 8 2 2 8 }$
$4 \longdiv { 2 0 6 1 }$

Divide and write remainder.

Name:

The pencil factory was making boxes filled with pencils. They made six large boxes, each with lots of pencils, but they forgot to label how many pencils are in each box. Anna was in charge of the boxes. She wrote $z$ on each box.


If $z$ represents the number of pencils in each box, then how many pencils are there altogether?
$z+z+z+z+z+z=$ $\qquad$
$r+r-4+9=$
$m+m+m+3-m=$
$15 s-9 s+16=$
$28 k-15 k+24 k+6 k=$

Amanda wrote the following program. She remembered to use * for multiplication in her code. Her program takes a given value of $r$ and then it calculates the value for $15 r$ $35+5 r+30$.

$$
r=2
$$

answer $=15$ *r-35+5*r+30
print("When $r$ is ",r," the answer is ",answer)
When this program is run, what will be printed to the screen?

Hunter wrote the following program. He remembered to use * for multiplication in his code.
$\mathrm{s}=2$
$\mathrm{m}=\mathrm{4}^{*} \mathrm{~s}$
print("Four times s is eight") print("The value of $m$ is ", $m$ )

When this program is run, what will be printed to the screen?

Name:
Write as a decimal.
One tenth
Write as a decimal.
Eight thousandths

Write as a decimal.
Two and four tenths



Write as a decimal.
Twelve and forty-three hundredths


Name: $\qquad$
Ready to make equations? There is a missing equation in each box.
Circle the numbers once you find it!


## Equations:

Write the equation facts you found.

| A | 63 | - |  | $=$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B |  | - |  | $=$ |  |
|  |  |  |  |  |  |
| C |  | - |  | $=$ |  |
|  |  |  |  |  |  |


| Can 557 be evenly divided by 4? Circle: |
| :--- | :--- | :--- |
| 557 is NOT evenly divisible by 4 |
| 557 is evenly divisible by 4 |\(\quad 252+256=··· . \begin{aligned} \& What time is 17 hours after <br>

\& 2:00 a.m.?\end{aligned} \quad\).

The students chosen for the class play were posted. All of the students in the play are in Mrs. Robinson's class and were born in months with exactly 31 days. For each student, write whether they are in the play, might be in the play, or are not in the play.

Connor is in Mrs. Robinson's class and was born on March 21.

David is in Mrs. Robinson's class and was born on June 12.

Sarah is in Mrs. Robinson's class and was born on May 24.

Sara is in Mr. Harris' class and was born on April 15.

Megan is in Mrs. Clark's class and was born on November 13.

Jack has 7 one-dollar bills, 12 five-dollar bills, 12 ten-dollar bills, and 10 twenty-dollar bills. He wants to pay a bill of $\$ 267$ at the grocery store and get no change. Which bills should he give the cashier?

Eric has a large collection of nickels, dimes, and quarters. He only wants to keep his quarters, so he gave away his nickels and dimes to his 3 friends. He gave $\$ 13$ to Adam, $\$ 12.95$ to Justin, and $\$ 10.73$ to Hunter. Wait! One of those amounts he counted is wrong. Which of the amounts did he count wrong and how do you know?

Anne is writing a computer program. In her program she made a pattern where she repeatedly is assigning numbers to colors.

The pattern is:
green, purple, orange, purple, purple.
Her program starts assigning numbers to colors like this:
$15=$ green, $16=$ purple, $17=$ orange,
18 = purple, 19 = purple, $20=$ green,
$21=$ purple, 22 = orange, 23 = purple,
$24=$ purple, $25=$ green, $26=$ purple, $27=$ orange, $28=$ purple, $29=$ purple

The program keeps running through the numbers.
When it gets to 36 , it prints $36=$ purple,
followed by 37 = $\qquad$ .

Name:
Use mental math to quickly solve.


Name:


Write a positive or negative number for each.
$15^{\circ} \mathrm{C}$ above zero
$5^{\circ} \mathrm{C}$ below zero
$10^{\circ} \mathrm{C}$ below zero

You had 10 points in a game and then you won 15 points. How many points do you have?

## Write the smallest number.

$-4.11,-900,-3,7,8,-946,175,-227.3,-0$, 854.14, 424, -1.06, -529.2, -726

Write the largest number.
740, -3, 9, -386, 8.02, -335, 5.13, 4, 2.08, 306.41, 818.8, 854, 7, 963

Write the smallest number.
9.07, -6, -2, -868, 443.1, -521.31, 706.77, 5.4,
$3,-8,-7,-4,955,0$

Name:
Draw a line to match each problem with the same answer.

| $34 \%$ of 50 | - $10 \%$ of 170 | $88 \%$ of 100 | - $51 \%$ of 100 |
| :---: | :---: | :---: | :---: |
| $30 \%$ of 90 | - $36 \%$ of 75 | $31 \%$ of 100 | - $62 \%$ of 50 |
| 78\% of 100 | - $90 \%$ of 190 | $34 \%$ of 150 | - $50 \%$ of 68 |
| 95\% of 180 | - $40 \%$ of 195 | $34 \%$ of 100 | - 50\% of 176 |

Change $\frac{3}{4}$ to a decimal.
$\mathrm{P}-\$ 59=\$ 38$
What is the value of $p$ ?
$4 \longdiv { 3 . 2 }$
If $a=3$ and $b=7$,
then
$3 a+b=$
$9 \times 49 \div 7-45 \div 9=$


$$
\frac{4}{9} \div \frac{22}{36}=
$$

Simplify.
$\frac{27}{63}=$

Name: $\qquad$

Get a fidget spinner! Spin it.
$7+5=$
$5+7=$
$8+5=$
$5+8=$
$5+3=$ $\qquad$ $9+6=$ $\qquad$
I needed to spin $\qquad$ time (s) to finish.
$7+8=$ $\qquad$
$4+3=$ $\qquad$ $4+8=$ $\qquad$ $8+7=$ $\qquad$
$14+8=$
$7+5=$ $\qquad$
$9+8=$ $\qquad$
$8+6=$ $\qquad$ $4+7=$ $\qquad$
$\qquad$
 $68+5=$
$\qquad$
$78+4=$ $\qquad$
$59+4=$ $\qquad$
$47+6=$ $\qquad$ $37+8=$ $\qquad$ $28+8=$ $\qquad$
$43+7=$
$16+3=$
$64+9=$
$14+8=$ $\qquad$
$74+3=$ $\qquad$ $24+4=$ $\qquad$ $66+5=$ $\qquad$ $43+7=$
$16+3=$
$64+9=$
$48+6=$ $\qquad$ $76+8=$ $\qquad$ $27+9=$ $\qquad$ $53+8=$ $\qquad$ $34+7=$
$\qquad$
$48+5=$ $\qquad$ $69+3=$ $\qquad$ $58+6=$ $\qquad$ $78+9=$ $\qquad$
$13+4=$ $\qquad$ $23+3=$ $\qquad$ $35+7=$ $\qquad$ $43+5=$ $\qquad$
$75+3=$ $\qquad$ $69+5=$ $\qquad$ $57+4=$ $\qquad$ $23+6=$ $\qquad$ $14+3=$ $\qquad$
$18+7=$ $\qquad$ $47+5=$ $\qquad$ $76+9=$ $\qquad$ $65+9=$ $\qquad$ $23+9=$ $\qquad$
$33+9=$ $\qquad$ $73+6=$ $\qquad$ $26+9=$ $\qquad$ $47+5=$ $\qquad$ $15+6=$ $\qquad$
$66+4=$ $\qquad$ $54+3=$ $\qquad$ $43+5=$ $\qquad$ $25+8=$ $\qquad$ $78+7=$ $\qquad$ $65+7=$ $\qquad$
$17+4=$ $\qquad$
$57+7=$ $\qquad$ $33+4=$ $\qquad$ $79+3=$ $\qquad$

Devin, Hannah, Jason, and Abigail each went on vacation with their father (Michael, Nicholas, Jacob, and Matthew). They each traveled to a different country (India, Spain, Singapore, and Estonia).

Figure out each person's father and the country they visited.

1. Hannah's trip was to a different continent than Nicholas' trip.
2. Abigail's trip was to a different continent than either Jacob's or Michael's trip.
3. Before the vacation, Jason and Hannah saw Abigail's dad, Matthew, at the mall.
4. Nicholas did not go to India.
5. Jason did not go to India.
6. Jacob went to either Singapore or Spain.
7. Michael went to either Europe or Asia.
8. Michael and Jacob went on vacation to the same continent.
9. Nicholas did not go to Spain.
10. Abigail did not go to Estonia.
11. Jason went to either Asia or Europe.
12. Before the vacation, Hannah and Jason saw Devin's dad, Jacob, at the mall.
13. Matthew went to either India or Singapore.
14. Devin's trip was to a different continent than Nicholas' trip.
15. Nicholas and Matthew went on vacation to the same continent.
16. Hannah went to either Singapore or Estonia.

Devin's father's name is $\qquad$ They went on vacation to $\qquad$
Hannah's father's name is $\qquad$ They went on vacation to $\qquad$ Jason's father's name is $\qquad$ . They went on vacation to $\qquad$
Abigail's father's name is $\qquad$ They went on vacation to $\qquad$



