Name:

Feldspar is a common mineral on Earth. By some estimates, feldspar makes up three-fifths of the mineral mass in the crust. Convert this fraction to a percent.

If you have five books, how many different ways are there to stack these five books on a table?

If you have four 2 in by 2 in $\times 2$ in aluminum cubes and superglue them together in a row, what is the surface area of the resulting shape made by the four cubes?

What is the probability of choosing a heart from a standard deck of 52 randomly arranged playing cards?

Mary enjoys playing disk golf. She has really improved in recent months, and she got her lowest score ever, today. She scored a 34 on a nine-hole course. She remembered last year when she played the same course for the first time and scored a 50 . By what percent did her score decrease this last time compared to the time she scored a 50 ? Round your answer to the nearest tenth of a percent.

The number of coyotes in the area around Big Town has changed over the years. During the previous survey, which was done two years ago, there were estimated to be 553 coyotes. The most recent survey indicates the coyote population has increased by $5 \%$. If this is true, what is a good estimate for the number of coyotes presently around Big Town?

Name:
Only use a pencil to write the numbers on the blank lines. You do not need any scrap paper! Solve it in your head. If you forget a number, then start over. Cool, huh?

| imagine 9 in your <br> head <br> double it <br> add 7 | imagine 5 in your <br> head <br> subtract 3 <br> add 6 <br> double it <br> subtract 7 |
| :--- | :--- |
| $\frac{\text { Write the ones digit. }}{}$ | Write the number. <br> $\frac{B}{2}$ |


| imagine 3 in your <br> head <br> multiply 8 <br> double it <br> add 1 <br> add 9 <br> subtract 6 |  |
| :--- | :--- |
| Write the even digit <br> in your answer. | imagine 3 in your <br> head <br> add 1 <br> add 9 <br> add 4 <br> double it |

What is the sum?

$$
A+B+C+D
$$

## Wow! Great job! That's the answer, but do you know how to SPELL the number?



2 after 11 $\qquad$
1 after 18 $\qquad$ _

4 after 17 $\qquad$ -

7 before 13 $\qquad$ 8 before 11 $\qquad$

4 before 14 $\qquad$ 9 before 16 $\qquad$

Jack has to write examples of five different kinds of poetry for his language arts class. He has written a cinquain and a haiku. Now he is trying to think how to start a limerick. The big football game is on television at 4:00 p.m. and if he doesn't finish this assignment, he can't watch it. He only has 44 minutes left until time for the game! What time is it (for Jack)?

Sara and Jason are planning a garden. Sara said if they make the garden round it would look better. Jason said if they make the garden square they will be able to plant more. They have enough space to make a round garden with a diameter of twenty feet or a square garden with each side being twenty feet. If they put four plants in each square foot of ground, how many more plants will they be able to plant in the square garden than they could plant in the round garden?

Pam has given powers to her collection of dolls. There are the J dolls and the G dolls.
Today, she is having a match between one J doll and one $G$ doll. The doll with more power will win. Who will win?

## Four J dolls have 2 power points.

## Six G dolls have 7 power points.

Circle the percentage that is closest to 32 out of 61 :
95\%
70\%
5\%
44\%


$$
\text { If } a=8 \text { and } b=7 \text {, }
$$

then
$4 a+b=$

Name: $\qquad$

ACROSS

1. One more than 6-Across
2. Three more than 17-Down
3. Six times 3-Down
4. One-ninth of 12-Down
5. Seven less than 14 -Down
6. One-sixth of 18 -Down
7. One-ninth of 17-Down
8. Six less than 14-Across
9. Four less than 16-Down
10. Two more than 18-Down
11. 11-Across plus 12-Down
12. $8+8=2 x$ $\qquad$
13. Two less than 5 -Across

## DOWN

3. One-fourth of 14-Down
4. Six more than 11-Across
5. 16-Down plus 20-Across
6. Three times 3-Down
7. Nickels in three dollars
8. One-fourth of 11-Across
9. 7-Across plus 3-Down
10. 8-Across plus 20-Across
11. Four times 3-Down
12. 7-Across plus 8-Across
13. Nine times 2-Across
14. Seven times 8-Across
15. Five less than 24-Down
16. One more than 19-Down


| $(4+6)+6=$ | $\begin{array}{r} 38 \\ +\quad 22 \\ \hline \end{array}$ | $20 \div 10=$ | $\begin{array}{r} 37 \\ -\quad 26 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |

Name:

$3810-5627=$

$3 0 \longdiv { 7 1 4 7 }$

Find the sum of 89,13 , and 94.

$$
383+140+562=
$$

Divide and write remainder.


Name:

The Market on the Square had to buy 23 new carts. The price of each cart was $\$ 129.95$ plus $\$ 10$ per cart to put the name of the market on the cart. If the manager of Market on the Square decides to buy 11 new carts with the name of the market and the rest without, what will the cost be?

During the month of Ramadan, Muslims fast from sunrise to sunset. In New York City, the sun will rise at 7:12 a.m. and set at 6:31 p.m. on October 16. How long will the Muslims in New York City fast on that day?

At the St. Patrick's Day party, sandwiches and drinks were served. Each guest could choose a corned beef, ham, or fish sandwich and coffee, tea, or lemonade. If each guest can have one sandwich and one drink, how many different combinations are there to choose from?


Name:


Name: $\qquad$
Can 816 be evenly divided by 3 ? Circle:
816 is evenly divisible by 3 816 is NOT evenly divisible by 3

| $24 \div 8=$ |
| :--- |
| $70 \div 7=$ |
| $12 \div 6=$ |

Write this as a number in standard form. Use a comma in your number.

For 17,731,200,567,450, write the digit that is in the hundred thousands place.
five hundred twelve thousand, five hundred sixty-four
(
(

| hundred sixty-four |
| :--- |
| What should replace the $R$ in this equation? |

$40 \div 8+R=43$

| $40 \div 8=\square$ |
| :--- |
| $8 \times 3=$ |

Circle the addition property for $76+74=74+76$. commutative property associative property

Three girls ran a race.
Mary ran past Maria in the race and Maria never caught up.
Anne was not as fast as Mary. Who won the race? Do you have enough information to know?
$8 \times 9=$
$12 \div 2=$ $\qquad$
$\qquad$

Name: $\qquad$

$$
\begin{aligned}
& 7 \bullet 3 \bullet 6 \bullet 6 \cdot 4 \bullet 2 \bullet 1 \bullet 4 \bullet x \bullet 3 \bullet=\bullet 1 \bullet 2 \bullet=\bullet x \bullet 2 \bullet 3 \\
& =\bullet 9 \cdot 8
\end{aligned}
$$

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

$22 \div 2=\ldots$

What number is halfway between 3 and 13?

$$
835+147=
$$

Circle the greatest number: 36,497,051 94,037 827,325,861 5,482,619,012

Circle the digit in the tenths place.
98.711

## Name:

United States, Russia, Canada, and Austria competed in a two-run bobsled competition. The times on the first run were one minute and 52.19 seconds, one minute and 52.41 seconds, one minute and 52.04 seconds, and one minute and 51.54 seconds.
The times on the second run were one minute and 53.18 seconds, one minute and 53.41 seconds, one minute and 53.61 seconds, and one minute and 54.10 seconds.

Figure out the time needed for each run and the combined run time for each team.

1. The team that finished the first run in one minute and 52.19 seconds was not the team that finished the second run in either one minute and 54.10 seconds or one minute and 53.61 seconds.
2. The bobsled team from Russia clocked a combined time of three minutes and 46.14 seconds.
3. On the second run, the team from United States was one second and one hundred eighty-seven hundredths of a second slower than their first run.
4. The team from Canada needed more than one minute and 53.54 seconds to finish the second race.
5. On the first run, the team from Russia was fifty hundredths of a second behind the winners of the first run.

United States finished the first run in $\qquad$ and the second in $\qquad$
Russia finished the first run in $\qquad$ and the second in $\qquad$
Canada finished the first run in $\qquad$ and the second in $\qquad$
Austria finished the first run in $\qquad$ and the second in $\qquad$

| $7 \times 11=\ldots$ | $108 \div 9=\ldots$ |  |
| :--- | :--- | :--- |
| $11 \times 3=\ldots$ | $8,823-5,649=\square$ |  |

Name:
Reduce $\frac{56}{64}$ to its lowest
terms.
$74-\frac{7}{8}=$

Reduce each fraction to its lowest terms.

| $\frac{24}{54}=$ |  |
| :--- | :--- |
| $\frac{7}{35}=$ | $\frac{6}{8}=$ |
| $\frac{8}{24}=$ | $\frac{48}{72}=$ |
| $\frac{63}{91}=$ |  |



Write the reciprocal.
$\frac{1}{2}$


Write the reciprocal.
$\frac{20}{7}$

Name:
Simplify.
$\frac{18}{21}=$
hundred thirty-seven minus the product of $s$ and 22.8.
Rewrite as an algebraic expression or equation.

Six thousand, seven


Rewrite as an algebraic expression or equation.

Add 17 to the product of $v$ and 12
$0.4(0.8(0.4 \times 7))=$
$\mathrm{U}, \mathrm{U}, \mathrm{C}, \mathrm{C}, \mathrm{U}, \mathrm{U}, \mathrm{C}, \mathrm{C}, \mathrm{U}$,
$\qquad$ , C, C


What is the mode of the following number set?
$38,45,57,50,45,56,39,39$, $43,53,40,38,52,46$
i, G, i, G, i, G, i, G,
$\ldots, G, i, G$

$$
11+5 \times 11+8
$$

$\qquad$


Name:

$27 \div 3=$
$18 \div 9=$
$21 \div 3=$
$55 \div 11=$
$36 \div 9=$
$15 \div 3=$
$84 \div 7=$
$24 \div 12=$
$90 \div 9=$
$42 \div 7=$
$12 \div 2=$
$16 \div 4=$
$--7=15 \quad \ldots-4=45 \quad 83-\ldots=77$
$50-\ldots=43$
_

- 9 = 83
$76-\ldots=71$
$95-\ldots=90$
- 
- $3=82 \quad 79$ -
- 

= 71

$$
\ldots-4=10 \quad 73-\ldots=68 \quad--9=52
$$

Name:


| 5.5 |
| ---: |
| +19.36 |

Name:


Sal has a square piece of sweet St. Augustine sod that has a perimeter of 36 units. What is the area?



Sal's Spiffy Sod Farm has been hired to lay sod on the yard below. Find how many $4 \times 4$ pieces of SUPER CENTIPEDE sod Sal needs to cover the yard.


Name:
If a rubber band can be stretched to a circular shape that has a radius of 2.4 inches. How many $1.2-\mathrm{mm}$ diameter toothpicks of could fit within it? $(1$ inch $=25.4 \mathrm{~mm})$

Show the steps to solve $5(44-7+13) \times 13-64 \times 13 \div 2$.
Step 1. Parentheses
Step 2. Exponents
Step 3. Multiplication \& Division (or Division \& Multiplication!)
Step 4. Addition \& Subtraction (or Subtraction \& Division!)

Wendy got a summer job working on an app where people post pictures of their pets. This week they had 1,000,000 pictures posted. Of those pictures, $37 \%$ were dogs. How many pictures of dogs did they get this week?

Name: $\qquad$

Work Area:

|  |  |  |  | 25 |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | 8 | 23 |
|  |  |  |  | 17 |
|  | 8 |  |  | 23 |
| 25 | 18 | 26 | 19 | + |

The sum for each column
$2 \Omega=$
 $=$ and row is given.

Work Area:

|  |  |  |  | 24 |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | 21 |
|  |  |  |  | 19 |
|  |  |  |  | 19 |
| 22 | 21 | 15 | 25 | 4 |

The sum for each column and row is given.


$$
\text { 时 }=
$$

Name: $\qquad$


False


True
False
True


False


True
False


True
False

True
False

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

Name:


True


Did you find that three are true? If not, look again!
Hint: If you see the same pieces on both sides, you might need to remove both pieces.
You should only mark TRUE if you are absolutely sure it is correct!

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

| 27.6 | 25.3 | 23 |
| :---: | :---: | :---: |
| 20.7 | 18.4 |  |
| 13.8 | 11.5 |  |
| 6.9 | 4.6 |  |

Complete each pattern. Write what the rule is.

69295, 95692, 92956, 56929, 29569, 92956, 56929, 29569, 69295, 95692, 92956, 56929

764947, 477649, 494776, $\qquad$ , 494776, 764947,

477649, 494776, 764947, 477649, 494776, $\qquad$ 477649



