


False


True
False
True
False


True
Did you find that four 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:
$\square$

$-2+3=$


$-6+-11=$
$\square$ $2-3-2=$
$-38+25=$


$\begin{array}{r}936 \\ -1642 \\ -482 \\ \hline\end{array}$
$977 \quad 942$
401
893
926
$-671-893-252-755-543$


$$
\begin{array}{ll}
836-136= & 633-414= \\
620-371= & 392-314= \\
716-404= & 751-488= \\
836-751= & 909-802=
\end{array}
$$

Name:

$$
\begin{aligned}
& 625844 \quad 540 \quad 831 \quad 788 \\
& -592-836-448-589-547 \\
& 945 \quad 283 \quad 457 \quad 758 \quad 713 \\
& -753-188-104-629-423
\end{aligned}
$$



$\qquad$

Grandma Jefferson bought 7 journals for her memoirs. There are 595 pages in the journals in all. Each journal has an equal number of pages. How many pages are in each journal?

David was bored. He rode his bicycle 4.4 miles to his friend's house. If his average speed was 3 miles per hour, how long did it take him to get to his friend's house?

What number multiplied by 12 has a product of -216 ?

Emily got a summer job working on an app where people post pictures of their pets. This week they had 100,000 pictures posted. Of those pictures, $68 \%$ were dogs. How many pictures of dogs did they get this week?

Name:


Rewrite in scientific notation.
75,030,000,000

Simplify.

$$
\frac{64}{72}=
$$

Name:

$11 x-7=$

The perimeter of a rectangle is 20 cm . The longer side is 7 cm . How long is the shorter side?

Write as a decimal. $\frac{7}{10}$
$6+8+7 \times 2-3$

$639 \div 10$

> Change $\frac{32}{100}$ to a decimal.

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

Name:

Rewrite $12+-6$
$\qquad$
$-\quad$ _ $=$

Yummy Donuts gave three dozen chocolate donuts and six dozen jelly donuts to the school. How many donuts did they give?
$14+m=28$

If $\mathrm{m}=5$ and $\mathrm{j}=-37$ then what is $9 m+14 j-4 j=$ ?

What kind of angle has a measure of between $0^{\circ}$ and $90^{\circ}$ ?
$7+-4=$ $\qquad$
$7-4=$ $\qquad$

How much money is 1 quarter, 1 dime, 1 nickel, and 9 pennies?

What is the greatest common factor of 2 and 12?

On a number line, what is the number that is 9 to the left of 5 ?

It was 2 degrees below zero in the morning. By afternoon the temperature rose 24 degrees. How warm was it?

What is the least common multiple of 5 and 6 ?

Rewrite $\frac{2}{25}$ as a decimal.

Sketch an acute angle named $\angle E F G$.

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


Find a subtraction fact.


Find a subtraction fact.

C | 1 | 75 | 86 |
| :---: | :---: | :---: |
| 97 | 78 | 7 |
| 61 | 64 | 41 |
| 92 | 76 | 47 |

Find a subtraction fact.

## Equations:

Write the equation facts you found.


You are given five cards. One card has the number 1 on it, another card has a 2 , another card has a 3, another card has a 4 , and the last card has the number 5 on it. Use two cards to make a fraction. What is the smallest fraction that you can make?

How many centimeters are in 80 millimeters?
$\qquad$ centimeters

| $27 \mathrm{lb}=\ldots$ |  |
| ---: | :--- |
|  |  |
| 886 |  |
| -787 |  |

Name: $\qquad$
Write the final part of each math analogy.
one half of six : $3::$ one third of nine :
Explain why you think your answer is correct.

254:754 :. 186 :
Explain why you think your answer is correct.

PKFPKKFPKFP $\qquad$ : K :: DHBDHBDHBD

Explain why you think your answer is correct.

$$
\text { PGPGP____ : } G:: \text { BDBDB____ : }
$$

Explain why you think your answer is correct.

63 dice in 7 bags : $9:: 27$ dice in 9 bags :
Explain why you think your answer is correct.
eighteen shoes : 9 :: four earrings :
Explain why you think your answer is correct.

Name: $\qquad$
Amanda has a messy desk. She has a total of 32 markers, pens, and pencils.
She has 3 times as many markers as pens.
She also has 7 more pencils than pens.
How many pens does she have?

What is $\frac{2}{5}$ of 70 ? Show your work.

Maria drew a square. She said, "My square's perimeter is 60 cm more than its area." Amy wants to draw the same square but is confused. "You can't subtract area from perimeter," she replied. Amy knows the area should be in square centimeters and perimeter is in centimeters. Maria just thought they were both in centimeters. Can you figure out how long each side of her square is?

Name: $\qquad$
Complete each pattern.

$$
\begin{gathered}
c, \ldots, m, c, c, m, c, c, m, c, c, m \\
1,1, v, v, 1,1, v, v, 1,1, v, v, 1, \ldots,- \\
t, t, 2,0, \ldots, \ldots, t, t, 2,0,0,3, t, t, 2,0,0
\end{gathered}
$$

Complete each pattern. Write what the rule is.

68763, $\qquad$ , 63687, 36876, 68763, 87636,
$76368,63687,36876,68763,87636,76368,63687$

73869, 38697, $\qquad$ , 97386, 73869, 38697,
$\qquad$
$\qquad$ 97386, 73869, 38697, 86973, 69738

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

$$
\begin{aligned}
& \text { D, G, F, J, H, M, J, P, L, S, _, V } \\
& \text { B, H, D, K, F, N, H, Q, J, T, L, -- } \\
& \text { C, F, E, I, —, —, I, O, K, R, M, U }
\end{aligned}
$$

Complete each pattern. Write what the rule is.

$$
\begin{aligned}
& \quad, \frac{12 \frac{13}{15}, 13 \frac{1}{5}, 13 \frac{2}{5}, 13 \frac{11}{15}, 13 \frac{14}{15},}{14 \frac{4}{15}, 14 \frac{7}{15}, 14 \frac{4}{5}, 15,15 \frac{1}{3}, 15 \frac{8}{15}}
\end{aligned}
$$

$$
\begin{aligned}
& 17 \frac{2}{3}, 18,18 \frac{1}{5}, 18 \frac{8}{15}, 18 \frac{11}{15}, 19 \frac{1}{15}, 19 \frac{4}{15}, \\
& 19 \frac{3}{5}, \quad, \quad 20 \frac{1}{3}, 20 \frac{2}{3}, 20 \frac{13}{15},
\end{aligned}
$$

Name: $\qquad$

ACROSS
5. Four less than 11-Across
6. Five times 17-Across
7. Six more than 5-Across
8. One-eighth of 11-Across
9. Eight times 8-Across
10. $9+9=2 x$ $\qquad$
11. Nickels in eight dollars
13. Five less than 2-Down
15. One-seventh of 18-Down
16. One-seventh of 11-Down
17. One-fourth of 21-Across
21. Four times 11-Down
23. Two more than 4-Down
25. Six times 8-Across

## DOWN

1. Two more than 23-Across
2. Two times 8-Across
3. One more than 21-Across
4. One less than 22-Down
5. Two more than 11-Across
6. One-ninth of 7-Across
7. Six less than 8-Across
8. Five more than 25-Across
9. 22-Down plus 8-Across
10. 5-Down plus 11-Across
11. 21-Across plus 22-Down
12. 25-Across plus 11-Down
13. 8-Across plus 11-Down
14. Eight less than 17-Across


| $7,395+9,953=\ldots$ | Holly rolls a die. What is the <br> chance of her rolling a 2? |
| :--- | :--- |
|  |  |




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


Name:

Anna is playing Hannah a game of sock basketball. Hannah is currently leading 19 to 15. They play for a few more minutes till the final score of 16 to 19 is reached. Can you tell who won?

Amanda is playing Sarah a game of sock basketball. Sarah is currently leading 20 to 13. They play for a few more minutes till the final score of 23 to 24 is reached. Can you tell who won?

Amy is giving away money to everyone at her birthday party. For each consonant in a name, she gives out $\$ 2.29$. For each vowel she gives $\$ 4$. Ava and Jessica are leaving the party. How much should each of them get?

Erin rode her bike to Rose's house. Leaving her driveway, she turned left and rode about 2.6 kilometers where she turned right. Rose's house was the sixth house on the right side of the road. It's getting late, and Erin needs to go home, but she has brain freeze. Write directions on how she should ride her bike home from Rose's house.

Jason is trying to make as many cupcakes as he can, but he is down to his last 2 eggs. The recipe calls for 3 eggs, 3 cups of sugar, and 4 cups of flour. How much sugar and flour should he use?

Name:

| $54 \frac{4}{7}-\frac{1}{3}$ |  | -13 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


edHelper.com/math_worksheets.htm

## edHelper

Name:
The product of two numbers is -84 . The difference between the numbers is 19 . If the numbers are integers, what are possible values?

One side of a rectangle is 4 centimeters longer than the other side. The perimeter is 28 centimeters. How long is the longest side?

Name: $\qquad$


|  | 7 |  | 7 |  | 36 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | 38 |
|  |  | 7 | 7 |  | 40 |
|  | 7 |  |  |  | 33 |
|  |  |  |  |  | 24 |
| 38 | 40 | 37 | 26 | 30 | $\mathbf{+}$ |

The sum for each column and row is given.



Name: $\qquad$
$1-56 \mid \times[36 \mid=$


If $z=5$ and $w=-49$ then what is $9 z-12 w-3 w=$ ?
$60,66,72,78,84,90$, 96, _ , 108, 114
$(9+15)+6=2(v+7)$
What is the value of $v$ ?

$0.6(0.5(0.6+2))=$

$|-8|+p=16 \quad 2 \times 2 \times 2 \times 2 \times 2=2^{x}$

What is the value of $x$ ?
$y=x+17$
$y=26$
What is the value of $x$ ?

Name: $\qquad$
$9 \times 9 \times 9=x^{3}$
What is the value of $x ?$

$$
\frac{15}{22} \div \frac{9}{11}=
$$

In what quadrant would you find the point $(2,19)$ ?

A circle graph has five sections. Only four sections are labeled. The labels are $17 \%, 10 \%, 27 \%$, and $20 \%$. What should the missing section be?
$70,80,90, \ldots 110$,
120
$0.17 \cdot 9=$

What is the greatest common factor of the numbers 84 and 36 ?

What is the remainder of 49 divided by 8 ?
$0.4(0.8(0.4 \times 7))=$

A circle graph has four sections. Only three sections are labeled. The labels are $16 \%, 13 \%$, and $14 \%$. What should the missing section be?

## Simplify.

$$
\frac{6,800}{30,600}=
$$

Simplify.
$\frac{32}{56}=$

Name:
1 is written with an I.

## Roman Numerals

5 is written with a $V$.
10 is written with an X .

## 50 is written with an L .

100 is written with a $C$.
You cannot have 4 of the same letter consecutively.
4 is written as IV.
9 is written as IX.
40 is written as XL.
So you cannot write 44 like this: XXXXIIII.
But you would write 44 like this: XLIV.
Write the number as a Roman numeral and then find the Roman numeral.

I = $\qquad$
IV = $\qquad$ VIII $=$

IX = $\qquad$
$X I=$ $\qquad$
XIV $=$ $\qquad$
XVI $=$
XIX = $\qquad$
XLI = $\qquad$


12
XIXXXIXIIXX XVIIXIIIVV


43
XLIVXLIIIIXL XLIIIXIVXLI

## $8 \frac{\text { VIII }}{I V I I I X X X V V}$ IIIVIIIXLILX



16 XVI
XVIIVXXXIV IXXXVIXLIII



19
IXXXIXXIXVI IIXIVXIXVII

50
IIVLXXIXVV XLVIIIXXIII

3
XXIIIIVVIII XIIIVIIIVII

15
VIIILXVXLV XVXXXVIIXV

27
VXXVIIIIIXI XVIIXXVIILL

56
LVIIIVIVIII
XVILVIXIIIX

Name: $\qquad$
Make change. You can use $\$ 20, \$ 10, \$ 5, \$ 1,25 \llbracket, 10 \llbracket, 5 \llbracket$, or $1 \uparrow$.
Pam has $\$ 16.14$. She has 3 bills and 14 coins. How?


Erin has $\$ 45.15$. She has 5 bills and 12 coins. How?

Nathan has $\$ 41.12$. He has 6 bills and 14 coins. How?

Name: $\qquad$
Make change. You can use $\$ 20, \$ 10, \$ 5, \$ 1,25 \llbracket, 10 \llbracket, 5 \llbracket$, or $1 \uparrow$.

Make $\$ 12.37$ any way you want!

Make $\$ 51.38$ any way you want!

Make $\$ 13.24$ any way you want!

Make $\$ 16.37$ any way you want!


Name: $\qquad$


How many times do you need to spin?

I needed to spin time(s) to finish the page.

I needed to spin $\qquad$ time(s) to finish.
Spin fidget spinner. Quick!
$1+1=$ $\qquad$ $8+5=$ $\qquad$
$3+9=$ $\qquad$
$56 \div 8=$ $\qquad$ $7+3=$ $5+3=$ $\qquad$ $5 \times 4=$ $\qquad$
$4+6=$ $\qquad$
$5 \times 8=$
$8+3=$
$7 \times 9=$ $7+5=$ $\qquad$ 9-3 = $\qquad$ 9-5 = $\qquad$ $24 \div 8=$ $\qquad$
$7+3=$ $\qquad$ $7+4=$ $\qquad$ $8+7=$ $\qquad$ $8 \times 3=$ $\qquad$

7-3 = $\qquad$
$3+3=$ $\qquad$
$8 \times 5=$ $\qquad$ $4+9=$ $\qquad$ $18 \div 6=$ $\qquad$
$7+5=$ $\qquad$
$6+7=$ $\qquad$
$4 \times 6=$ $\qquad$
$9+4=$ $\qquad$

$8 \times 5=$

$38+8=$ $\qquad$
$16+3=$ $\qquad$
$24+4=$ $\qquad$ $78+9=$ $\qquad$ $44+8=$ $\qquad$ $56+4=$ $\qquad$
$15+8=$ $\qquad$
$65+9=$ $\qquad$ $58+4=$ $\qquad$ $68+3=$ $\qquad$ $34+6=$ $\qquad$
$43+3=$ $\qquad$ $73+8=$ $\qquad$ $28+5=$ $\qquad$ $76+7=$ $\qquad$
$45+7=$ $\qquad$ $35+8=$ $\qquad$ $28+6=$ $\qquad$ $56+4=$ $\qquad$ $69+5=$ $\qquad$
$17+8=$ $\qquad$ $23+4=$ $\qquad$ $17+5=$ $\qquad$ $34+3=$ $\qquad$ $79+6=$ $\qquad$

Name:

April loved lime-flavored soda, but it was hard to find the soda at the store. One time she couldn't find any of it for over a week. When she finally found three 2-liter bottles at Mark's Market, she bought all three and drank them in less than a day! How many pints of lime-flavored soda did she drink?

Jack sent a bouquet of 20 balloons to his mother on Parent's Day. The balloons cost $\$ 1.05$ each. There was an added charge of $\$ 0.10$ per balloon to have them blown up. The delivery charge was $\$ 7.18$. Jack paid for everything with a $\$ 50$-dollar bill. How much change did he get?

Which two of these numbers have a product of 1.024 ?
5.1
0.72
3.2
0.32
7.2
0.51
0.072
0.051

In each group, circle the number that has the greatest value, and put a square around the number that has the least value.

| $9^{3}$ | $9^{6}$ | $9^{1}$ |
| :--- | :--- | :--- |
| $3^{6}$ | $3^{4}$ | $3^{1}$ |

Name: $\qquad$

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

$$
15+32+(-41)+34=40 \quad 34+(-41)+48+41=82
$$



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: $-41,-14$, or -27. The other three numbers have to all be DIFFERENT and must be from these: 32, 34, $35,48,41,15$, or 43.


Name: $\qquad$
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: -40, -39, or -20 . The other three numbers have to all be DIFFERENT and must be from these: 21, 47, $39,13,42,44$, or 22.


Name: $\qquad$
Find the way from START to END by passing only through numbers that are multiples of nine.
You can go up, down, left, right, AND diagonally!

| START | 810 | 117 | 576 | 765 | 792 | 10 | 66 | 799 | 804 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 302 | 143 | 330 | 661 | 991 | 828 | 441 | 162 | 180 | 774 |
| 419 | 1 | 796 | 471 | 772 | 252 | 486 | 865 | 150 | 594 |
| 259 | 854 | 78 | 66 | 276 | 929 | 653 | 265 | 957 | 639 |
| 679 | 366 | 176 | 676 | 277 | 0 | 837 | 369 | 126 | 774 |
| 94 | 407 | 223 | 267 | 215 | 297 | 630 | 468 | 270 | 432 |
| 990 | 630 | 585 | 639 | 936 | 747 | 651 | 969 | 138 | 687 |
| 540 | 504 | 378 | 386 | 892 | 417 | 551 | 111 | 203 | 591 |
| 837 | 468 | 54 | 369 | 801 | 666 | 63 | 107 | 138 | 858 |
| 560 | 855 | 702 | 136 | 552 | 516 | 882 | 765 | 738 | END |

Name:
Each row, column, and box must have the numbers 1 through 6 . The first box is done.

| 5 | 4 | 3 | 1 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 6 |  |  | 5 |
|  |  |  |  |  |  |
|  | 1 |  |  |  | 4 |
|  | 3 |  | 6 |  |  |
| 4 |  |  | 2 |  |  |

Each row, column, and box must have 6 different pictures.


Name:

Hannah and Rosa are playing a new giveaway game. The game is in the shape of a circle. A light goes around the circle. When a player presses the button, the light stops. Players can win 1 ticket, 2 tickets, 3 tickets, 4 tickets, 5 tickets, 6 tickets, 7 tickets, or 8 tickets, depending on where the light stops. Hannah played one round, and then Rosa played a round. What is the probability that they both won more than 4 tickets?

A new book has been published. It is a fictional tale about the mad scientist Erin who is supposedly 260 years old and has invented a new robot. This robot doesn't walk, it doesn't run, but it can hop at a speed of 9,445 meters per hour. The robot's name is Connor, and it wants to visit a friend. The friend lives 35 kilometers away. How long would it take Connor to hop to its friend's house?

Estimate the smallest product you think you could get by multiplying two positive whole numbers. The first number needs to have 2 digits, and the second number needs to have 2 digits. Explain your estimation.

Now try to actually find the smallest product.

Name:
How many barks are equal to 6 roars?

$$
\begin{gathered}
6 \text { roars }=3 \text { growls } \\
12 \text { growls }=72 \text { meows } \\
2 \text { meows }=1 \text { bark }
\end{gathered}
$$

Mrs. Hernandez sent an e-mail out to parents asking them to send balloons to class. Sara brought in $\frac{1}{5}$ as many balloons as Connor. Connor brought in $\frac{1}{4}$ as many balloons as Jenna. Who brought in the most balloons?

Did you guess Jenna? You would be correct. She brought in 60 balloons! How many balloons did Sara and Connor bring to class?

Sarah has a new job working at Pizzeria Magpie. She loves it, but she can only work three hours on Monday, three hours on Tuesday, and seven hours on Saturday. The pizzeria will give her a check every two weeks. She will be paid $\$ 13.80$ per hour. How much will her first paycheck be?

Name:

$71=40+31$ $\qquad$

$=$


Name:



Name:

Anne went to the circus with her father and mother. The best part of the circus was the clown. He could juggle and make people laugh at the same time! The tickets cost \$5.74 each. How much did it cost for Anne, her father, and her mother to go to the circus?

Wendy went to the store. She bought a box of pasta for $\$ 1.60$, some cheese for $\$ 2.11$, and pasta sauce for $\$ 3.78$. How much did she spend in all?

Robert is painting a picture of his dog. He has painted for 2 hours and 23 minutes. He will be finished in 30 minutes. How long will it take him in all to do the painting?


Name:
What does the $\qquad$ stand for in the following equation?

$$
(\ldots \ldots \times 6)+18=72
$$

A) 3
B) 54
C) 48
D) 9
What number replaces the this a true statement?
15 x $\qquad$ $=90 \times 3$
A) 21
B) 18
C) 2
D) pennies
$\qquad$ to make

The volume of a box is 240 cubic inches. What is the volume of a larger box whose dimensions are three times the size of each dimension for the smaller box?
A) 4399 cubic inches
B) 6480 cubic inches
C) 5861 cubic inches
D) 720 cubic inches

What number is missing from the following sequence?
$96,88,80,72,64$, $\qquad$ 48
A) 55
B) 58
C) 59
D) 56

Which two numbers are both factors of 72 ?
A) 72,20
B) 8,22
C) 3,27
D) 9,8

## XIII + IV =

A) $X I X$
B) $X V I$
C) XVII
D) $X$

Name:

Amanda and Hannah play on the same softball team. Amanda was lucky enough to get her favorite number on her jersey. She likes it because the sum of its two digits is 11 . If you take Amanda's jersey number and reverse the digits, you would get Hannah's jersey number. Hannah has the smaller jersey number. It is 45 less than Amanda's. What could their jersey numbers be?

Holly and Jacob are in a class where they are practicing handshakes. There's a total of seventeen people in the class. Each student has to shake hands with everyone in the class exactly once at the start of class and once at the end of class. What is the total number of handshakes?

David made his own coin. On one side, he colored it green. On the other side, he colored it blue. Let's assume his coin is fair. Each time he tosses it there is a 50/50 chance of either color. If he tosses his coin two times, what is the chance that either one of the tosses will be blue and his other toss will be green?

A rectangle is fifteen and six-sevenths centimeters long. Its width is five and five-sixths centimeters. What is the perimeter of the rectangle?

Name:
Complete each pattern, using the same rule. Write what the rule is.
$6,36,41,246,251,1506,1511$,
$3,18,23,138,143,858,863$,
8, _ , _ ,, 1938

Find the missing numbers.

If
$1,1=1$
$2,2=4$
3, $3=9$
$4,4=16$
Then
$5,5=?$

If
$5,5=10$
$6,6=12$
$7,7=14$
$8,8=16$
Then
$9,9=$ ?

Name: $\qquad$

Connor decided to repaint his bedroom during Jump Out of Bed Month. It took two quarts of paint to paint ! IFS!^^^4!FE! of his room. At a cost of $\$ 20.15$ per gallon, how much will the paint cost for his whole room?

The high school is putting on a play entitled "Polar Bears and Penguins." An adult ticket to the play costs $\$ 6$. A student ticket is $\$ 4$. Alex paid $\$ 86$ for tickets to the play. He bought nine adult tickets. How many student tickets did he buy?

Hannah made a card for her parents to tell them she was sorry for not cleaning up the kitchen like she had promised. It took her 39 minutes to make the card and write what she wanted. If she started at 1:42 p.m., what time did she finish?

Who traveled the shortest distance?
Sarah took her electric scooter to the mall. It took her 15 minutes to get to the mall, and her average speed was 18 miles per hour.

Rose rode her bike for 45 minutes at an average speed of 13 miles per hour.

Peter walked at an average speed of 4.8 miles per hour for 3 hours and 30 minutes.

Anne and Wendy are playing games on their phones. Who spent the least amount of money?

Anne bought an avatar for 173 FunBucks. She also bought some stickers for 20 FunBucks.

Wendy bought a badge for her avatar for 40 PlayBucks.

$$
\begin{aligned}
& 1 \text { US Dollar }=33 \text { FunBucks } \\
& 1 \text { US Dollar }=6.6 \text { PlayBucks }
\end{aligned}
$$

Amanda and Hannah each wrote games for their phones, and the games are taking off!

After the first day, Amanda's game had 6,000 users. On day 2 she had 16,500 users. On day 3 she had 27,000 users. On day 4 she had 37,500 users.

After the first day, Amanda's game had 7 users. On day 2 she had 14 users. On day 3 she had 28 users. On day 4 she had 56 users.

If these patterns continue, whose game will have the most users on day 9?

Name: $\qquad$


Date played:

Whom I challenged:

Explain what you learned from one math problem you got wrong.


## edHelper

Name:
Amy rode her bike for 30 minutes. She went 4.35 miles. What is her speed in miles per hour?

Zeeka has invented a new space vehicle to go from his home planet of Zomba to his friend's planet of Oomba. It is a fun ride! It can fly at a speed of 540 mph . How far will it go in 30 minutes?

Name:
$\left.\begin{array}{|l|l|l|}\hline \text { David flew home for } \\ \text { Christmas. His flight was } \\ 2 \text { hours and } 12 \text { minutes. } \\ \text { The flight landed in } \\ \text { Jacksonville at 5:40 p.m. } \\ \text { It took him 37 minutes } \\ \text { to drive to the airport, } \\ \text { and he was an hour } \\ \text { and 19 minutes early for } \\ \text { his flight. At what time } \\ \text { did he leave his house? }\end{array} \quad \begin{array}{l}\text { A total of 90 jars of } \\ \text { mustard were divided } \\ \text { into } 10 \text { boxes. In each } \\ \text { box, there were 5 jars } \\ \text { of Dijon mustard. The } \\ \text { rest of the jars } \\ \text { contained yellow } \\ \text { mustard. How many jars } \\ \text { of yellow mustard were } \\ \text { there in all? }\end{array} \quad \begin{array}{l}\text { Amy walked to the } \\ \text { store in 15.3 minutes. She } \\ \text { bought Band-Aids for } \\ \$ 0.55 \text {, gauze for \$1.29, } \\ \text { and suntan lotion for } \\ \$ 2.89 \text {. She gave the } \\ \text { clerk a \$10 bill. She left } \\ \text { the store at 3:45 a.m. It } \\ \text { took her 19 minutes to } \\ \text { walk home. How much } \\ \text { longer did it take her to } \\ \text { walk home than it took } \\ \text { to walk to the store? }\end{array}\right\}$

| Adam bought 2 books about mules. He received $\$ 4.07$ back in coins. He has 10 quarters, half as many dimes as quarters, 3 times as many nickels as dimes, and the rest are pennies. How many of each coin does he have? | If you placed three British 10-penny coins together in a triangular pattern, what would the distance be from the center of one coin to the center of another? A 1969 British 10-penny coin has a diameter of about 2.8 cm . | Mr. Martin bought 4 cases of sour licorice for his candy shop. The cost was $\$ 107.95$ per case. There are 12 boxes in a case and 6 bags in a box. What was Mr. Martin's cost per bag? |
| :---: | :---: | :---: |

The Bigtown football team outscored its opponents $5: 3$ last season. If their opponents scored 34 points, how many points did Bigtown score?

Jason hit a home run that went 328 feet on Saturday. On Monday, he hit one that went 300 feet. The distance of the second home run was what percent of the first home run? Round your answer to the nearest whole number.

A 500-gram package of growth powder made by Z-Globe contains $0.03 \%$ yeast extract by mass. What fraction of the powder is not yeast extract?

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

David's go-kart travels at a maximum speed of 38 kilometers per hour. How far can it go in 19 seconds? Round your answer to the nearest hundredth.

Near the end of the Ordovician period (about 430 million years ago), the Earth's sea level is thought to have been about 400 feet above the current sea level. If the Earth's current sea level rose by 20 feet, what would the difference in sea level be, compared to the sea level near the end of the Ordovician period?

One-third of the class grew peas, one-third grew carrots, and one-third grew beans. The class consisted of 63 students of which four-sevenths were girls. The teacher chose the three groups to be as equal in their boy-girl composition as possible. How many boys and girls were assigned to each team?

One-fifth of the students in James' class in Perth are immigrants. If there are thirty-five people in the class, how many students are not immigrants?

The magnetic field of the Earth reverses polarity every 100,000 to 1,000,000 years. What would the minimum expected number of polarity reversals be after a period of 603 million years?

With the help of Mr. Bloop, some middle school students measured the growth rate of a fungus. An old fashioned (but still useful) apparatus called a race tube was used. A small piece of the fungus was placed at one end of a long tube that had a layer of growth medium filling it about half way. Then the distance the fungus grew down the tube was measured each day. At the end of two weeks the fungus had advanced 36 cm along the tube. What was the average speed of advance of the fungus in $\mathrm{m} / \mathrm{s}$ ? Express your answer using scientific notation.

David collects aluminum cans and takes them to the recycling center every week. He put recycling boxes in all the classrooms, the cafeteria, and the teachers' lounge. He put a sign on each box asking people not to put anything but aluminum cans in them. Every week, though, David finds objects other than aluminum cans in the recycling boxes. He estimates that fifteen percent of the weight of the material in the boxes is non-recyclable junk. The total weight of all the items collected in the recycling boxes this week was one hundred sixty-seven pounds. What was the weight of the aluminum cans, rounded to the nearest tenth pound?

Erin is monitoring the aircraft that fly over her house on their way to land at the local airport. Over the course of the week she counted 26 two-engine jets, 14 propeller driven planes, and 18 four-engine jets. Based on her data, what is the probability that the next aircraft to fly over will be a propeller driven plane?

Name: $\qquad$


|  | Work Area: |
| :---: | :---: | :---: | :---: | :---: |
|    5 <br> 1,890    <br>     <br> 1,512    <br>  5 5 5 <br> 3,402 420 900 750 |  |

The product for each column and row is given. Blanks use numbers 2 to 9 only.


号 $=$ $f_{4}^{2}=$

Work Area:

|  |  |  |  | 945 |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | 840 |
|  |  |  |  | 540 |
|  |  |  |  | 480 |
| 360 | 980 | 972 | 600 | $X$ |



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


Name: $\qquad$

$$
7 \cdot 2 \cdot 3 \bullet+\bullet 6 \cdot 5 \bullet+\bullet=\bullet 6 \bullet 6 \bullet 1 \cdot 2 \cdot 1 \cdot 5 \cdot 5 \bullet \div \cdot 0
$$

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



## Letters Kissing

Each of the letters needs to kiss the same letter.
Draw a line that connects one letter to one other letter to kiss. Draw your lines over the trace lines. No lines may cross. Once you draw a line to a letter, that letter cannot be used again.

One complete line has already been drawn for you.



Name: $\qquad$
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: 18.4, 29.2, or 25.6. The other three numbers have to all be DIFFERENT and must be from these: $1.8,9.6$, 2.2, 4.2, 0.7, 6.8, or 5.2.


Name:
Fill in the blanks with >, =, or the < sign.


The area of a square is 68.89 square inches. What is its perimeter?

The (make-believe) country of Slowmonia is always super slow. But they are hard working, and after 19 years of research, the country of Slowmonia launched a rocket into space to land on Pluto. It is slow! It travels 3.342 kilometers in a month. How far will it travel in 80 years?

Name: $\qquad$


## Equations and Hints:

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

$$
\begin{aligned}
& A+A+C=20 \quad B+\ldots+C=23 \quad Z^{+}+--\ldots=6 \\
& \ldots+\ldots-\ldots=11
\end{aligned}
$$

Additional hints:

$$
B=C+5 \quad C<10
$$

Show Work:
? =

Name: $\qquad$
Fill in each box of the edHelperKu puzzle, using the numbers from 1 to 6 .
Every row must contain the numbers $1,2,3,4,5$, and 6 .
Every column must contain the numbers $1,2,3,4,5$, and 6 .
In a cage with a plus sign, the given number will be the sum of all the digits in the cage.
In a cage with a subtraction sign, the given number will be the difference. The largest number will always be the box with the clue.


Fill in the blanks. These equations are from the puzzle above.
$\qquad$ $+$ $\qquad$ $+4=7$
$\qquad$ $=10$
$+6+$ $\qquad$ $=14$

$$
-1=5
$$

$\qquad$ $+4=9$

$$
\begin{aligned}
& 6+ \\
& \\
& \hline
\end{aligned}
$$

$2+$ $\qquad$ $=7$
__ $+1+$ $\qquad$ $=9$
_ $+5+$ $\qquad$ $=9$

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

| 9 | 63 | 441 | 3,087 | 21,609 | 151,263 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 18 |  | 162 | 486 | 1,458 |
| 7 | 42 | 252 | 1,512 | 9,072 |  |
| 8 | 40 |  | 1,000 | 5,000 |  |

Complete each pattern. Write what the rule is. Hint: Look for alternating sequences. Every third number is the greatest common factor.

11, 18, 1, 22, 30, 2, 33, 42, 3, 44,
$54,2,55,66,11,66,78,6$, $\qquad$
$55,15,5,66,27,3,77,39,1,88$,
$51,1,99,63,9,110,75$, $\qquad$ ,

Name:

A train carrying coal took 7 hours and 20 minutes to travel from Chicago to Detroit. A passenger train started from Chicago and reached Detroit in 5 hours and 16 minutes. The passenger train was traveling at an average rate of speed that was sixteen mph more than the coal train. How fast was each train traveling?

If Danielle's age is forty less than seven times her age four years ago, she will be sixteen years older than her current age. How old is Danielle?

Connor has 7 liters of 50\% acid. How much water should he add to make a solution that is $35 \%$ acid?

A mixture of $12 \%$ vegetable broth and $88 \%$ water is to be used in making a soup. How much water should be added to 3 liters of vegetable broth to make the mixture?

Kyle and Destiny worked as plumbers for $\$ 30$ and $\$ 39$ per hour, respectively. In August, Kyle worked sixteen hours less than Destiny. If their total income for August was $\$ 10,008$, how many hours did Destiny work?



