After doing an experiment you learn that 78 percent of the carrot seeds from company A germinated (began to grow) within ten days, while only 54 percent of the seeds from company B germinated within ten days. What was the comparative germination ratio?

"They" are found on Mars, Venus, and Earth. As far as is known there are fifty-four of "them." If eighteen are on Mars, and sixteen are on Earth, what fraction of "them" are on Venus?

Anna estimates that three-fifths of a certain type of stone has a mass greater than three-eighths of a gram. If she has 460 of these stones, about how many stones have a mass less than or equal to three-eighths of a gram?

Jessica has measured some yeast cells she isolated from the surface of grapes. The cells she measured were 23, 16, 23, 22, 12, and 23 micrometers in length. What was their average length in meters? Express your answer using scientific notation.

Ms. Floop bowled three games today. She scored 185 the first game and 210 the second game. What is the minimum number of points she needs to obtain a total score of 570?

At the Smallville Animal Hospital it costs \$31 dollars to perform a procedure on a dog that weighs greater than 35 pounds, and \$24 dollars for a dog that weighs from 20 to 35 pounds. What would be the total cost to perform the procedure on a group of dogs that had the following weights (in pounds): 36, 42, 23, 26, 31, 37 and 39?

Which is bigger, a third of 33 or one-sixth of 138?

If the perimeter of an equiangular triangle is 78 centimeters, what is the length of one of its sides?

Divide and write remainder.

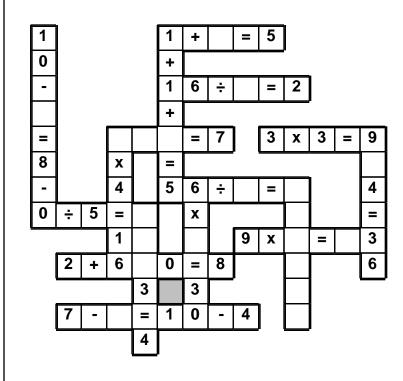
Divide and write remainder.

Divide and write remainder.

831 is how much more than 40?

4 • 8 • 2 • 4 • + • 3 • x • 7 • 8 • 0 • + • 1 • 5 • 7 • 6 • + = • 1 • 1 • 5

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



Write the reciprocal.

6___

Write the reciprocal.

<u>23</u> 18 $3\frac{5}{6} \times 1\frac{1}{2} =$

Simplify.

$$\frac{25}{30} =$$

27 - † + 10 = 15

What is the value of t?

What is the value of y?

$$7y + 17 - 3y = -4$$

Hunter is a volunteer at a kitchen that serves meals to people that need help. He uses 1 $\frac{1}{4}$ pounds of meat to make enough spaghetti sauce to serve 8 people. How many people could be served if he used 28 pounds of meat?

If a rubber band can be stretched to a circular shape that has a radius of 3.4 inches. How many 1.2-mm diameter toothpicks of could fit within it? (1 inch = 25.4 mm)

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 900 mph. How far will it go in 30 minutes? Round your answer to the nearest mile.

Find the sum of 8, 9, 1, and 4.

Change 0.12 to a percent.

Write the decimal number for:

eight hundred seventy and four hundred twenty-one thousandths



Get a fidget spinner! Spin it.

I needed to spin _____ time(s) to finish.

How many centimeters in 2.9 meters?

Round 99,456 to the nearest hundred.

63, ____, 77, 84, 91, 98,

12 - 2 + (12 x 8)

It was 87 degrees outside. What would the temperature be if it got 20 degrees colder?

 $7 \div \frac{1}{5}$

105, 112, 119

6, 6, 2, 2, 2, 6, 6, 6, 2,

2, 2, 2, 6, 6, 6, 6, 2, 2, 2,

2, 6, 6, 6, 6, 6, ____, 2

652996, 299665, 966529,

652996, 299665, 966529,

652996, 299665, 966529,

652996, 299665, 966529,

____, 299665

It was 3 degrees above zero in the morning. By afternoon the temperature rose 17 degrees. How warm was it?

What 5 coins add up to 46 cents?

Write $\frac{3}{15}$ in lowest terms.

5 + 10 - 2

Name: _

The monthly premiums for Mr. Martin's life insurance are \$19.69. At that rate, what is the yearly cost for Mr. Martin's life insurance?

Hannah and Emily are playing a number game. Hannah says 7. Emily replies that the answer is 42. Hannah says 5. Emily replies that the answer is 30. Hannah says 8. Emily replies that the answer is 48. Hannah says 17. Emily replies that the answer is 102. Hannah says 3. Emily is thinking. What number should Emily reply with?

For 159,122,729, write the digit that is in the hundred thousands place.

What number is halfway between 14 and 21?

40 ÷ 5 = ______ 9 0 _- 5 0 Erin rolls a die. What is the chance of her rolling a 2?

11 x 5 =

9,645 - 4,281 = _____

1 cm = 10 mm

24 cm = _____ mm

Name: __

Sudoku Sums of 9

Each row, column, and box must have the numbers 1 through 6. Hint: Look for sudoku sums. The sum of the two boxes inside of the dashed lines is 9.

4 4 1 + 3 7 8

Here is an example of a sudoku sum of 9:

•	
•	_
: Ц	5
. 4	:)
	_
•	

				2	1
	4			3	
	5	2	3	4	
				1	
6					
4	2				

2 9 + 4 1

Rewrite these in increasing order of length:

234 km, 914 cm, 474 m, 6 mm

12 x 9 = _____

3 2 0 - 2 6 2

12 x 6 = _____

90 ÷ 9 = _

110 ÷ 11 =

How many inches are in 5 feet?

_____ inches

9,588 - 5,356 = _____

$$(8 + 3) + 5 =$$

14 ÷ 2 = _____ 55 ÷ 5 =

108 ÷ 12 = _____

12 x 3 =

Three girls ran a race.
Anna was not as fast as Rosa.
Rosa ran past Sarah in the race and Sarah never caught up.

Who won the race? Do you have enough information to know?

12 x 12 = _____

Circle the digit in the hundredths place.

177.3934

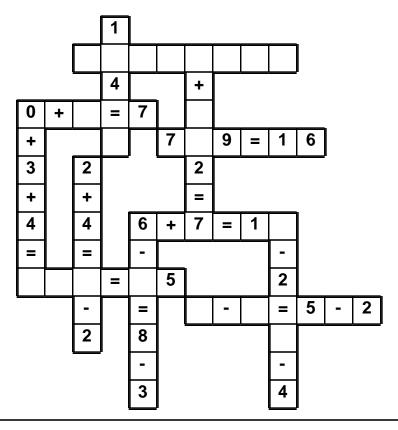
 $8 \times 7 =$

The letters F, G, J, L, N, P, Q, R, S, and Z do not have line symmetry. The rest of the letters in the alphabet do. Can you write someone's name where the complete name has line symmetry? Hint: You cannot use all of the letters. You could use B in a name, but M would not work.

Write 51,800 in words.

80 ÷ 8 = ____

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



What Words? Your Words!

Fill in the boxes with letters to make words. Each box is worth points. Earn points by filling in as many boxes as you can. Sum up the points you earn for each word.

Once you use a letter, cross it off on the bottom. You cannot use the same letter more than once.

Make a Word	Sum	Make a Word	Sum
	7	S H 1 2 4 6 10 14	
R E 2		1 2 4 6 A	
ABXDKFGMI. NXPQKXXUV		XBCDEFGXIJ NOPQRXTUVW	

word root **de** can mean **down**

deposit, demolish

Name: _____ The number 6.646 to the nearest 10 is 6.650. plotted decomposed rounded simplified Skill: Estimation and Number Theory What is the difference in simplest form? 3 - 1 2 Skill: Fractions and Mixed Numbers (addition/subtraction) What is the value of the 4 in 98,462?

five hundred eighteen thousand, seventy-six

51,876

5,180,760

518,760

Skill: Whole Numbers, Factors, and Prime Numbers

Skill: Whole Numbers, Factors, and Prime Numbers

What is the sum in simplest form? $\frac{1}{5} + \frac{1}{5}$ 5

What is the value of the 4 in 98,462?

Skill: Whole Numbers

Skill: Fractions and Mixed Numbers (addition/subtraction)

The number 8,634 rounded to the nearest _____ is 8,630.

10 10,000 100 1,000

Skill: Estimation and Number Theory

6 and 0 are _____ numbers.

composite prime
irrational encrypted

Skill: Basics of Fractions and Mixed Numbers

The factors of this number are 1, 2, 13, and 26.

182 1 52 26

Skill: Whole Numbers, Factors, and Prime Numbers

1	. T					
	N	ล	n	n	e	•

Complete each pattern. Write what the rule is.

108	96	84
72		48
36	24	

Complete each pattern. Write what the rule is.

14, 18, 22, 27, 32, 38, 44, 51, 58, ____, 83, 92, 102

43, 47, 51, _____, 67, 73, 80, 87, 95, 103, 112, ____, 131, 141, 152

For today's exit ticket from class, the teacher wrote: Find 40% of 16.

Erin thinks it is 0.4×16 . Anna thinks it is 4×16 .

Who is correct and what is the answer?

Amanda's car averages 19 miles per gallon. Ava's car is more efficient and travels about 33 miles on one gallon of gas. If the girls each drive their cars 627 miles, how much more gas will Amanda's car need?

Emma and two of her friends do yard work on the weekends. This weekend, they made \$80.43 together. If they want to try to split the money evenly using only dollar bills and quarters, how much will each get? Is there any remainder?

Jason has an equal number of quarters and nickels in his coin collection. They total \$6.90. How many quarters does he have?

Add one set of parenthesis to each equation so that the equation is true.

$$(9 - 9) \div 6 = 0$$

$$7 + (4 \times 8) = 39$$

$$8 \times 9 - 6 = 24$$

$$8 \times 9 - 6 = 66$$

$$6 + 8 - 3 + 11 = 22$$

$$6 + 8 - 3 + 11 = 0$$

$$6 \div 6 + 9 + 2 = 12$$

$$4 + 12 - 6 \times 2 = 16$$

$$7 + 11 \times 10 + 4 = 184$$

$$10 + 6 + 12 \div 6 = 18$$

$$8 + 9 \times 12 - 10 = 106$$

$$10 + 4 \times 6 + 2 = 42$$

$$2 + 6 + 1 \times 8 = 16$$

$$10 - 9 + 8 \div 2 = 5$$

$$9 + 1 \times 5 + 8 = 22$$

$$10 \times 11 - 3 + 8 = 99$$

$$10 + 1 \times 4 + 9 = 23$$

$$7 - 5 \times 12 \div 3 = 8$$

Can you figure out the value of the letter?

5h + 9 = 39

first subtract 9 from both sides

then divide each side by 5

$$5h + 9 - 9 = 39 - 9$$

$$5h = 30$$

$$5h \div 5 = 30 \div 5$$

$$h = 6$$

Double check: $(5 \times 6) + 9 = 39$

$$9w + 8 = 71$$

Double check: $(9 x _) + 8 = 71$

$$8d - 4 = 4$$

d = ____

Double check: $(8 X ___) - 4 = 4$

b = ___

Double check: $(4 \times 1) + 9 = 29$

a = ___

Double check: $(6 \times _{--}) - 23 = 13$

Double check: $(6 \text{ X } __) - 11 = 37$

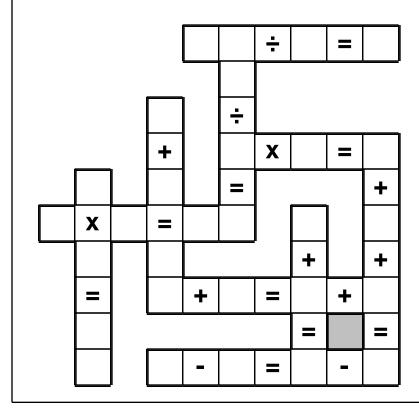
Mental Math		— #1 —
☼ Start with the number 527.	<u>527</u>	
Add the number of cups in 3 quarts. 9 4 1 4 6 5 3 9 2 1 (Circle your answer to double check you are correct.)		
Add the digits in your number. The sum of that is your new number. 3 8 2 0 1 7 4 1 5 7		
Add half of 58.		
Divide by 2.		
\$\to\$ Subtract 15. \\ 5 8 1 5 4 3 8 9 6 1		
Add half of 40. 8 7 2 6 1 8 2 8 4 4		
Add two-thirds of a dozen. 3 6 3 6 7 5 2 2 6 6		
# Multiply by 10. 1841236064		
Divide that number in half.		
Add the number of ounces in 2 pounds.		

anie	
Mental Math	<u> </u>
◆ Start with the number 513. <u>513</u>	
 Add the digits in your number. The sum of that is your new number. 7 3 4 3 5 8 9 9 1 2 (Circle your answer to double check you are correct.) Add the number of quarters in a dollar. 4 3 5 6 1 0 1 3 6 7 Multiply the tens digit by the ones digit. The product is your new number. 5 6 4 4 2 9 6 0 3 3 Multiply by 7. 1 6 2 1 4 8 5 0 9 3 Round that number to the nearest ten. 7 3 8 2 0 3 5 1 4 0 	
Mental Math	
Start with the sum of 11 and 3. 5 1 1 4 4 4 1 0 3 8 (Circle your answer to double check you are correct.)	
❖ Triple that number.	G III

Start with the sum of 11 and 3. 5 1 1 4 4 4 1 0 3 8 (Circle your answer to double check you are correct.)	
Triple that number. 5 4 2 6 8 4 3 7 4 9	
* Add 18. 9068608519	
Divide by 10. 6034854596	
Add half of 60. 7383663745	
Divide that number in half. 6 6 7 4 8 1 8 3 5 8	

6 • 3 • 9 • 7 • 6 • 1 • 6 • 0 • 0 • 9 • 9 • 2 • 8 • 1 • 6 • 3 • 0 9 • 1 • 0 • 7 • 2 • 5 • 8 • 1 • 2 • 2 • 5 • 5

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



$$\frac{2}{3} \div \frac{9}{12} =$$

Simplify.

$$\frac{140}{168}$$
 =

0.17 • 6 =

If t = 12 and w = -5 then what is $t^2 - w^2$?

If a = 7 and n = -54 then what is the value of m? 6a + 15n - 4n = m

Draw 1 of these 3 pictures. Draw 1 of these 3 pictures. The picture IS in the correct spot. The picture IS in the correct spot. Draw 1 of these 3 pictures. Draw 1 of these 3 pictures. The picture IS in the correct spot. ! The picture is NOT in the correct spot. Draw the 3 pictures in the correct order: Draw 4 pictures in the correct order. Use each of the clues so you will know what to draw. Draw 1 of these 4 pictures. Draw 1 of these 4 pictures. The picture IS in the correct spot. !The picture is NOT in the correct spot. Draw 1 of these 4 pictures. Draw 1 of these 4 pictures. !The picture is NOT in the correct spot. ! The picture is NOT in the correct spot. Draw 2 of these 4 pictures. None of those pictures are in the correct spbt. Draw the 4 pictures in the correct order:

Draw 3 pictures in the correct order. Use each of the clues so you will know what to draw.

	_			
	ิล	n	•	٠.
1.4	1			

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

5	6	1		2	
2	4	3	5		
1	3			5	
		5			1
	1				
3		2			

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

Name:		
Circle words to the RIGHT	or DOWN. Every letter is used exactly ONCE. D T O E S D E M O L I S H E D E R I H L A P T U R T L E C R F E T O G O L D M A G I C A E L P O R C H A R A C T E R P L O L P T D W S T F I N E S T I W A E E Y O A O S E L F K A	
Write the words found.	C E C R N E N W Y G A M E I I T R E A S D E D I C A T E M N	
CAPTAIN	OKT) 4	
C/ II I/ LIV	SKIM	
Circle words to the RIGHT	or DOWN. Every letter is used exactly ONCE. U M B R E L L A S E C R E T S	
	ADVOCATESDEGREE	
	B J I N S T R U C T I O N S M E A G L A M O R O U S L Y S	
	A A W M D O D A M P W E R E T R S Y E T O D O W N T O W N O	
NA/wite the accordance for mode	R T O N C O L L E A G U E S O Y S U D	
Write the words found.		
STOOL	INSTRUCTIONS	

Select the word or phrase whose meaning is closest to the given word.

TACTFUL

honed coarse sharp blunt discreet

OMINOUS

foreboding passion pleasant dearth thriving

ARCANE

handicapped esoteric magical excited philosophical

FIASCO

debacle music genre success pet food annual event

PROSAIC

captivating collage type of medicine long memo dull text

FLAMBOYANT

reflective incompetent youthful showy fiery

AWE

speech concern sigh expression of sympathy shock

AILMENT

illness potion cauldron barrel alcohol

PANACEA

jail museum praiseful speech all inclusive cure-all

Now find the given words AND the answers in the word search. If you can't find an answer, you might be wrong.

ECECCUIOCNITIIBEAFLAMBOYANTRCIFOCR
PTXETLLUDMUOETLDRITUWRLIBYALSHOWYW
CDAELLNFIASCOEDLLLMTTCFOREBODINGLE
HLEDPYXCCLRNOLRENTESEDACIAAOEUETIO
LNECLENACRAROSRCTEYFAAHCOSALLSTMEK
SAESOTERICBDGEAYSISPPIAEMDAWELFACC
RTEARFNIPANACEADIIESURLTACTFULRTFO
CAETOMINOUSCIASORPDAHTEBATNEMLIANH
DDDOELPIDEBACLECTRUNALNTOEUTYRRSAS

Name:		
maine:		

What's in the Box?

Read the words on the left then match the letters with the correct synonyms in the clues. Put the clues together and solve the mystery of what is in the box.

A =unleash	Clue 1:	chef	attic	ship	beat	power	
C =defeat		S	p_				
E =explosive							
H=oil	Clue 2:	chef	lube	release	grime	bomb	mistake
I =vessel							
K =dirt	Ch	مد:ما	ماء اما		م مار را		
L =tablet	Clue 3:	bite	ship	puny	lube		
N=meadow							
P =loft	Clue 4:	chef	release	pill	puny		
R=error	Cide i.	Cilei	release	Piii	puriy		
S =cook							
T =small	Clue 5:	chef	pasture	bomb	bomb	gully	bomb
W =nip						97	
Y =might							
Z =gulch							

What's in the Box?

72 ÷ 12 =	If you divide 81 by 5, you get a re of 1. Make up three other different equivalent you divide by 5 and get a remainder of 1.		36 ÷ 6 =
9 x 9 =	Write the numbers 60 to 90 on a sheet of paper. How many of these numbers are divisible by 9?	What time is 13 hours after 2:00 a.m.?	

word root **tort** can mean **twist**

contortion, distort, distortion





