

Week by Week Essentials Mathematics

Grade 4

Week 1

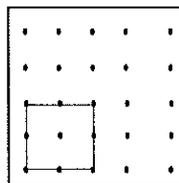
Calculate !

You can only press these keys:

$$6 \div - x + =$$

Make your display read 7. Keys can be used more than once. Write a description of what you have done.

Keeping an Eye Out for Math



How many 2 x 2 squares can you make on a geoboard? How many 3 x 3 squares? How many 4 x 4 squares? Do you see a pattern?

Record your solutions on a geoboard record sheet.

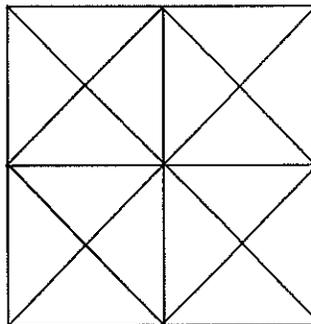
Thinking Mathematically

Write a story that is illustrated by this equation.

$$7 + 6 = 13$$

Fraction Action

Explore different ways to color one-half of the area of this design?

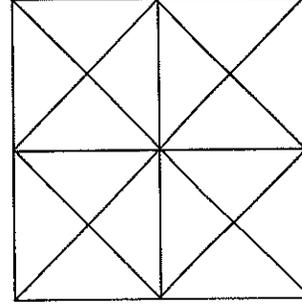
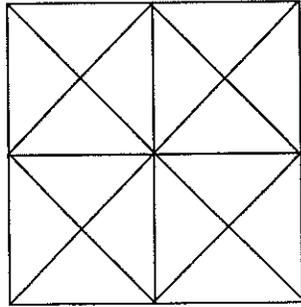
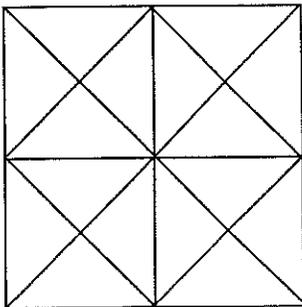
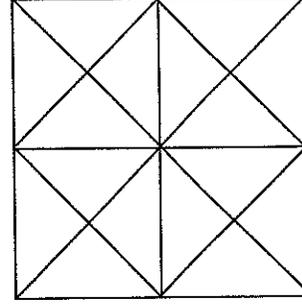
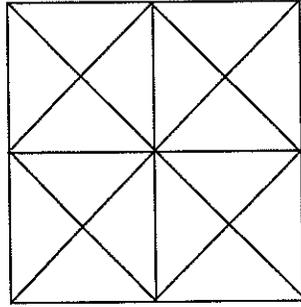
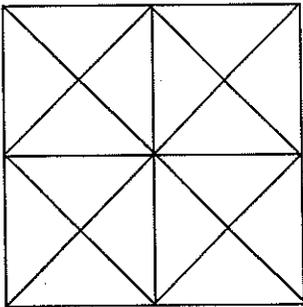
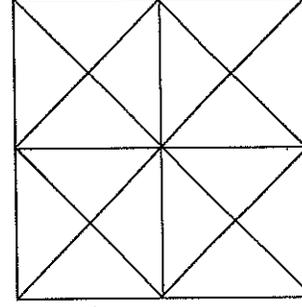
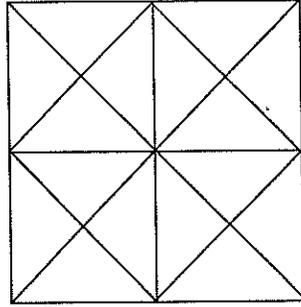
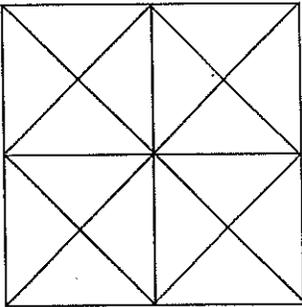
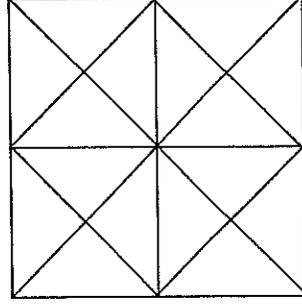
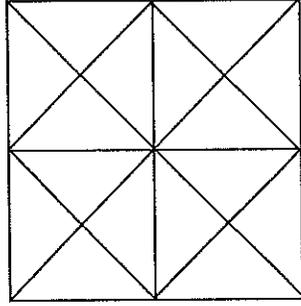
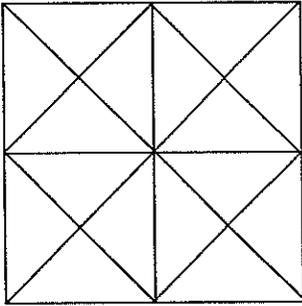


Record your solutions on Fraction Action Recording Sheet 1.

Exploring Data

List your place of birth by city, county, state, and country. Add your name to the class Venn diagram to show where you were born. Look at the data on the diagram. Were any students born outside the United States? How many students were born in your town?

Fraction Action Recording Sheet



Place 12 markers on the gameboard; take turns rolling 2 dice and using any operation to remove a marker. Winner is first to clear the board. (See integrated plans for alternate rules.)



WIPE OUT!

1	2	3	4	5	6
7	8	9	10	11	12



WIPE OUT!

1	2	3	4	5	6
7	8	9	10	11	12

Keeping Skills Sharp

Write answers here:

1. $25 + 634 =$

1. _____

2. $158 - 83 =$

2. _____

3. $6 \times 8 =$

3. _____

4. $5 \times 4 =$

4. _____

5. $7 \times 3 =$

5. _____

6. $\$4.03 - \$0.67 =$

6. _____

7. 4 feet = _____ inches

7. _____

8. Write six thousand thirty-seven in standard form.

8. _____

9. Jenny bought 2 meters, 40 centimeters of rope. Jeff bought 250 centimeters of rope. Who bought more? How much more?

9. _____

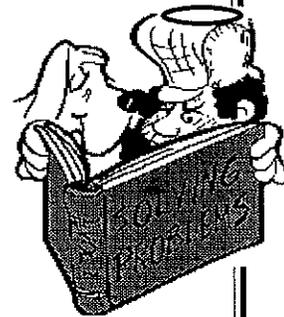
10. Mike boarded the train at 11:30 a.m. He arrived at 5:30 p.m. How long was his trip?

10. _____

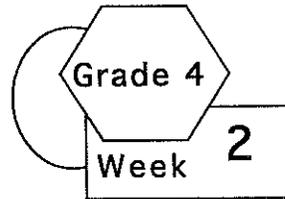
Problem of the Week

Every bike slot in a bicycle rack was filled. Ellen's bike was in the middle. There were seven bikes to the left of Ellen's. How many bicycles were in the bicycle rack?

Show your work. Explain your thinking.



Week by Week Essentials Mathematics



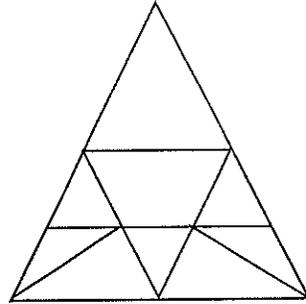
Calculate !

What numbers could be placed in the box to make the computation correct?
Is there a way to shortcut trial and error?

$$341 - \square = \text{a number between } 115 \text{ and } 120.$$

Keeping an Eye Out for Math

How many triangles can you find?



Create a new triangle puzzle.

Thinking Mathematically

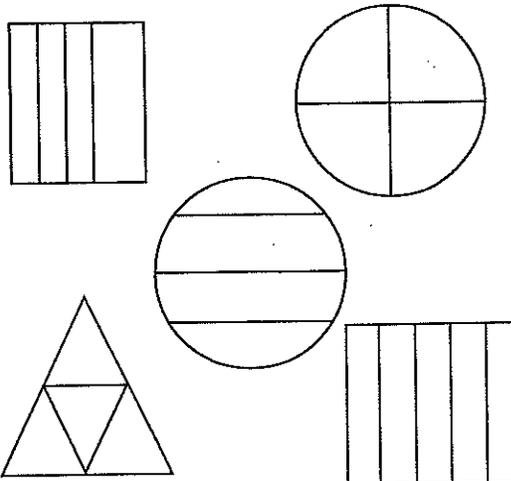
Adam has a "function machine" that follows a rule to change numbers which he puts in. Here is a chart of what happened the last time he used it.

IN	OUT
1	5
2	7
3	9
4	
...	
10	

Complete the table.
What rule did Adam tell the function machine to use?

Fraction Action

Cross out any regions that are not divided into fourths.

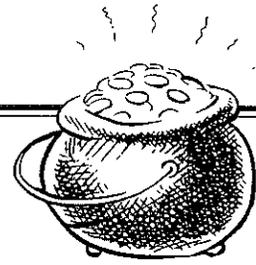


Choose one you crossed out. Circle it and tell why you crossed it out.

Exploring Data

Get a friend to measure your height in centimeters. Share your data with the class. With your partner, brainstorm different ways to display the class data. Make a poster showing a way that you think displays the data appropriately.

Blackbeard's Treasure Box



Directions: You and your partner need a red die and a green die, 10 markers each (players have different colors), and a gameboard. Players take turns rolling the dice. If, for example, a green 2 and a red 3 are tossed, the player would cover the gem at (2, 3). If a player tosses and the gem at that place is taken, the player loses that turn. The first to get four in a row wins.

Variation: Players may win by seeing who can cover four adjacent gems to form a box.

Red Die

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

Green Die

Keeping Skills Sharp

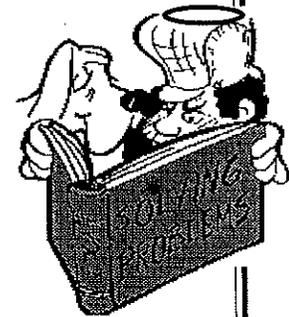
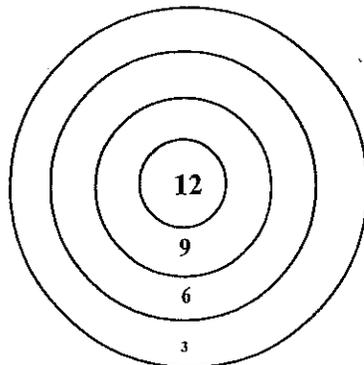
1. $834 + 359 =$
2. $170 - 93 =$
3. $4 \times 6 =$
4. $9 \times 7 =$
5. $2 \times 3 =$
6. Number of sides on four quadrilaterals.
7. 1 meter = ___ centimeters
8. Round to the nearest thousand: 7, 432
9. Jane owes a friend \$2.38. She has \$8.25. Will she have enough money for a \$4.00 matinee after she pays her friend? Exactly how much money does she have left after the matinee?
10. Ben has \$2.00 with which to buy marbles. Aggies cost \$0.16 each, and migs cost \$0.18 each. If Ben buys 9 Aggies, how many migs can he buy?

Write answers here:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

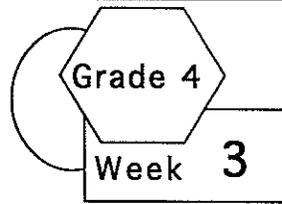
Problem of the Week

David was playing darts and scored exactly 21 with 3 darts. Show where his darts might have landed.



If he got all three darts on the board, what other scores could he have made? Show how he might get each score.

Week by Week Essentials Mathematics



Calculate !

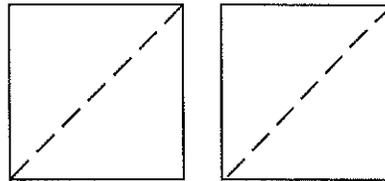
Find two numbers whose difference would be 153.

Keeping an Eye Out for Math

Use four right triangles cut from two squares. How many different shapes can you create? (No holes in the middle; edges must match.) Sketch each shape you find.

Thinking Mathematically

Think of three hats that you would like to have. If you wore all three hats at the same time, one on top of the other, how many different ways could you wear hats? Show how you solve this problem.



Fraction Action

$\frac{1}{3}$ is _____ pieces of the whole

$\frac{2}{3}$ is _____ pieces of the whole

$\frac{3}{3}$ is _____ pieces of the whole

$\frac{1}{6}$ is _____ pieces of the whole

$\frac{2}{6}$ is _____ pieces of the whole

$\frac{3}{6}$ is _____ pieces of the whole

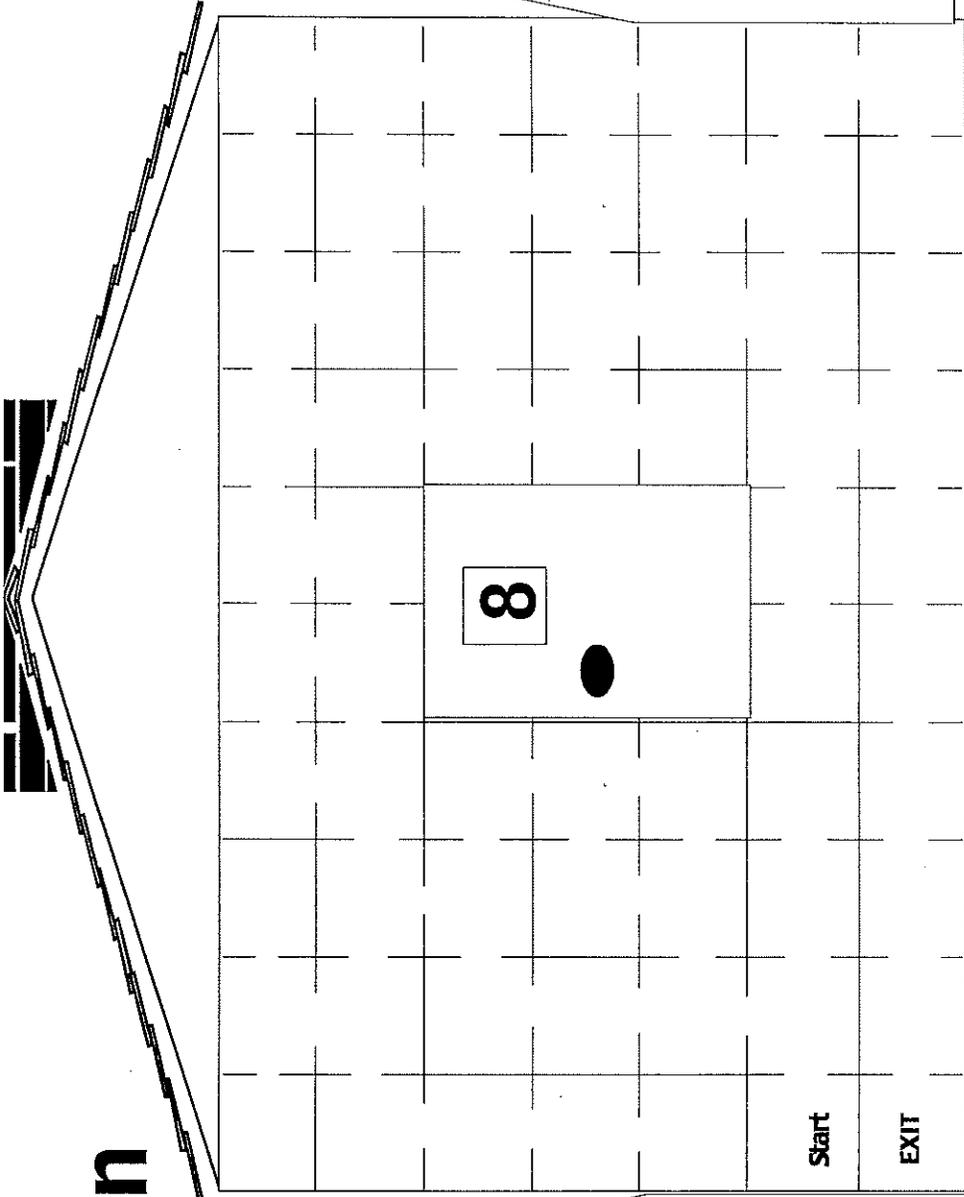
What do you notice about $\frac{1}{3}$ and $\frac{2}{6}$?

$\frac{2}{3}$ is equivalent to how many sixths?

Exploring Data

Is there a favorite fast food of students in your class? In the fourth grade? Decide as a class how you will gather the data in your room and then in the entire fourth grade. Make two different bar graphs to display your findings. Write a report on the data to share with other students.

Fort Macon Maze



Directions: Place your markers outside the entrance to the maze. Roll to see who goes first. At each turn a player rolls the dice, adds, and multiplies the sum by 8. If the correct product is given, the player moves through the maze the number of spaces on one of the dice. Winner reaches EXIT first.

Number of Players: 2-4

Materials: Gameboard, a pair of regular dice, a marker for each player

Keeping Skills Sharp

Write answers here:

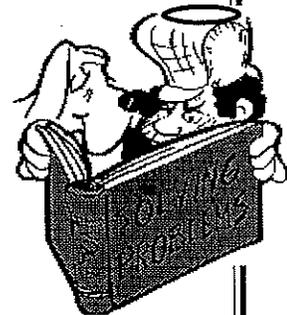
- | | | | | | |
|-----|--|----|----------------|-----|-------|
| 1. | $1,220 + 810 =$ | 2. | $878 - 459 =$ | 1. | _____ |
| 3. | $8 \times 4 =$ | 4. | $7 \times 6 =$ | 2. | _____ |
| 5. | $6 \times 9 =$ | | | 3. | _____ |
| 6. | If you spend \$2.35, how much change would you get from a \$5.00 bill? | | | 4. | _____ |
| 7. | Number of sides on 3 triangles and 5 rectangles. | | | 5. | _____ |
| 8. | Order from least to greatest: 807, 870, 780 | | | 6. | _____ |
| 9. | A football team scored three touchdowns (7 points each) and two field goals (3 points each). What was their final score? | | | 7. | _____ |
| | | | | 8. | _____ |
| 10. | At the grocery store, eggs cost \$0.49 for a half-dozen. A dozen eggs cost \$0.91. Which is a better buy? | | | 9. | _____ |
| | | | | 10. | _____ |

Problem of the Week

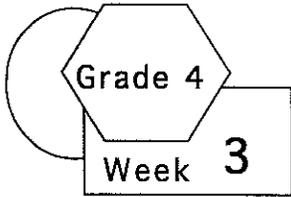
Using the digits 1 to 9, arrange the numbers in three groups so that the sum is the same in each group.

Is there more than one way to do this?

Show all ways you find.



Teacher to Teacher



ABOUT THIS WEEK

Calculate!

There are infinite possibilities, beginning with 154 - 1; 155 - 2; etc.

Thinking Mathematically

Read Laura Geringer's Three Hat Day to the class. Discuss some different ways to wear 3 hats. (There are 6 different ways to wear 3 hats.) Extension: "How many different ways could RR Pottle wear 4 hats?" (24: $4 \times 3 \times 2 \times 1$) Challenge students to predict how many ways 5 hats could be worn. (120: $5 \times 4 \times 3 \times 2 \times 1$) Interested students might pursue the question for larger numbers of hats. (This activity is a concrete way for students to experience permutations-grouping of a given set of objects in which the order matters.)

Exploring Data

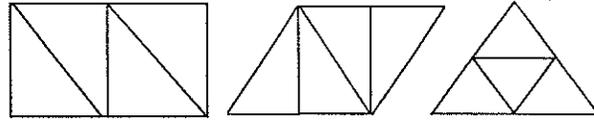
The two bar graphs might be
 a) one for each question or
 b) a vertical bar graph and a horizontal bar graph.

Problem of the Week

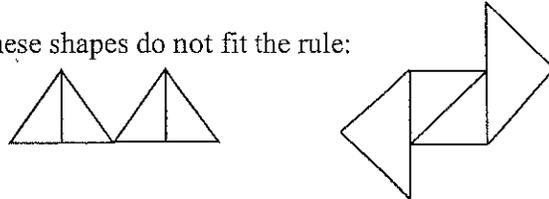
One solution: 4,5,6 8,7 1,2,3,9.
 Other solutions may be possible

Keeping An Eye Out for Math

Possibilities:



These shapes do not fit the rule:



(whole sides must match)

A bulletin board display or poster could be made of the different shapes. Use this chance to review polygon names (rectangle, triangle; parallelogram, trapezoid, square ...) and the characteristics of each.

Fraction Action

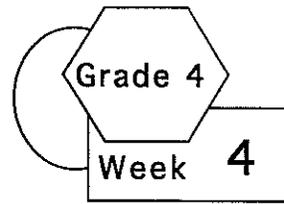
Answers: 2, 4, 6, \leftarrow 1, 2, 3
 $1/3$ and $2/6$ are the same number of pieces.
 $2/3$ is equivalent to $4/6$.

Be sure students understand that having the same number of pieces (i.e., being the same amount) means that the two fractions are equivalent.

Answers to Keeping Skills Sharp	Mental Math *
1. 2,030	1. 10 more than 53
2. 419	2. $6 + 5 + 4 - 3 + 2$
3. 32	3. Is 585 nearer 500 or 600?
4. 42	4. $7 + 13$
5. 54	5. 9×0
6. \$2.65	6. If it is 3:20 now, what time will it be in 5 minutes?
7. 29	7. Number of feet in a yard
8. 780, 807, 870	8. Double 13
9. 27	
10. dozen at 91¢	

*Please refer to the introductory section on Mental Math (p.3)

Week by Week Essentials Mathematics

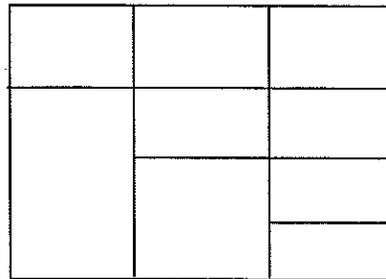


Calculate !

If I could afford to give you one dollar for your first birthday, two dollars for your second birthday, four dollars for your third birthday, and continue doubling the dollars for each birthday until your tenth birthday, how much would I have given you?

Keeping an Eye Out for Math

How many different rectangles are there? Find a way to record your results.

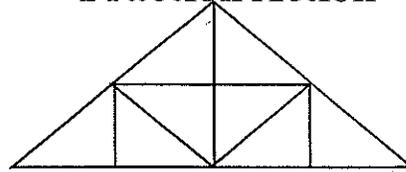


Thinking Mathematically

Write a story that is illustrated by this equation.

$$7 \times 4 = 28$$

Fraction Action



1/8 is _____ pieces of the whole

2/8 is _____ pieces of the whole

4/8 is _____ pieces of the whole

6/8 is _____ pieces of the whole

1/4 is _____ pieces of the whole

2/4 is _____ pieces of the whole

3/4 is _____ pieces of the whole

4/4 is _____ pieces of the whole

Which fractions are equivalent?

Exploring Data

Survey your classmates to find their

FAVORITE APPLES

Red Delicious

Golden Delicious

Granny Smith

favorite of these apples. Display your data in an appropriate way. Be sure your display is clearly labeled. Tell why you chose this method.

Blackbeard Strikes!

Directions: The first player chooses any square on the board and gives the factors and the product. If the player is correct, he places a marker on that space. If the player is incorrect, he loses a turn. The second player takes a turn. The winner is the first player to cover 5 squares in a row, column, or diagonal. Players may not cover any square already covered.



5 x 9 3 x 8 4 x 5 3 x 8 5 x 8 2 x 4 3 x 7

6 x 4 5 x 4 5 x 8 4 x 4 5 x 3 4 x 7 5 x 7

2 x 9 5 x 5 6 x 3 4 x 6 2 x 2 6 x 7 2 x 7

6 x 8 2 x 3 3 x 4 5 x 2 3 x 5 5 x 6 4 x 8

5 x 4 4 x 9 6 x 6 4 x 3 6 x 7 3 x 5 5 x 9

3 x 8 3 x 9 6 x 5 6 x 9 6 x 8 2 x 5 6 x 4

4 x 2 6 x 7 4 x 7 2 x 6 3 x 6 4 x 8 3 x 6

Keeping Skills Sharp

Write answers here:

1. $10,109 + 977 =$

3. $8 \times 5 =$

1. _____

2. $1,287 - 748 =$

4. $7 \times 7 =$

2. _____

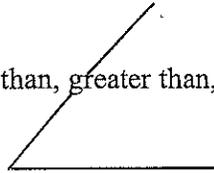
5. $12 \div 6 =$

3. _____

6. $3\frac{1}{2}$ pounds = _____ ounces

4. _____

7. Tell whether this angle is less than, greater than, or equal to a right angle:



5. _____

8. $8,000 + 60 + 300 + 7$

6. _____

9. Cecil earns 50 cents for doing chores each day of the week. How much does he earn in 7 days?

7. _____

10. Ten alligators went down to the river. Three of them laid 5 eggs each. A snake ate 8 of the eggs. How many eggs are left?

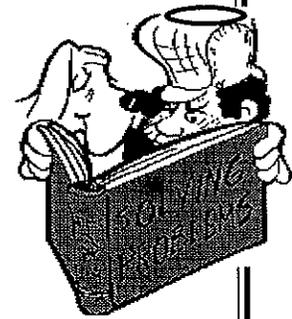
8. _____

9. _____

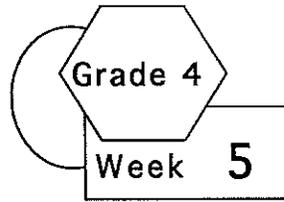
10. _____

Problem of the Week

Sandra is more than 20 years old and less than 60 years old. You can count by 7's to reach Sandra's age. Next year you will be able to count by 5's to reach Sandra's age. How old is Sandra? Show how you figured this out.



Week by Week Essentials Mathematics



Calculate !

Use only the

5 **3** **-** and **=**

keys to make 20. Keys can be used more than once.

How did you do this?

Keeping an Eye Out for Math

Cut out a triangle.  Tear off the corners. Paste the corners side by side so each corner touches the same point.

Try this for 3 other shapes and sizes of triangles. Write about what happens.   

Thinking Mathematically

Draw a quadrilateral. Connect the corners. How many diagonals did you draw?



Draw a pentagon. Connect the corners. How many diagonals did you draw?



Continue with other polygons. Make a table to show your results.

How many diagonals are there in a decagon? Describe the patterns that you see.

Number of Sides	Number of Diagonals
4	2
5	
6	
7	
8	

Fraction Action

Count by thirds from 8 to 12.

8, $8\frac{1}{3}$, _____, ...

What whole number is equal to $8\frac{3}{3}$)?

Clue:

$$\frac{3}{3} = \underline{\hspace{2cm}}$$

Exploring Data

Find the time for each student to run a quarter of a mile. Collect data and determine the class average. (Use a calculator.) Using the class average, how long would it take the "typical" student to run from Manteo to Murphy? What else do you need to know?

Pieces of Eight

1 2 3 4 5 6



1

Materials:

Numbered dice.

Number of Players:

2-4

Rules:

1. Every player rolls the dice and chooses one of the spaces he or she rolled. For example if the player rolls a 1 and 3, the player may choose, (1,3) or (3, 1)

2. The player with the 8 in the place with the largest value wins the round. In case of a tie the player with the largest number wins.

3. Play 15 rounds. The player who wins the most rounds wins the game.

284,935	453,829	359,842	259,348	895,432	935,428
245,893	529,438	389,452	594,832	485,392	423,985
948,325	942,385	843,529	938,425	824,593	284,953
823,459	538,924	325,984	829,534	532,984	593,824
982,453	954,823	342,958	583,249	935,248	358,294
423,589	498,235	358,924	394,285	459,238	834,529

1

2

3

4

5

6

Keeping Skills Sharp

Write answers here:

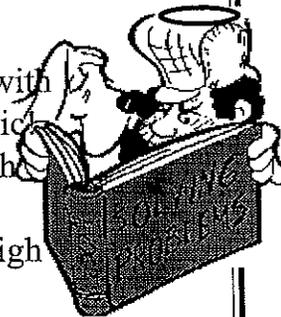
- | | | |
|--|-------------------|-----------|
| 1. $447 + 2,816 =$ | 3. $8 \times 9 =$ | 1. _____ |
| 2. $6,493 - 2,389 =$ | 4. $16 \div 4 =$ | 2. _____ |
| 5. $10 \div 2 =$ | | 3. _____ |
| 6. 1 nickel + 2 quarters + 8 pennies + 3 dimes | | 4. _____ |
| 7. 1 pint = ___ cups | | 5. _____ |
| 8. What digit is in the thousands place: 534,068 | | 6. _____ |
| 9. Ned and Sue traveled with a tour group having 80 members. Half of them went to the zoo. They went through in 4 groups of equal numbers. How many people were in each group? | | 7. _____ |
| 10. They went in the zoo shop. Sue bought 4 stuffed animals for \$5.00 each. Ned bought 2 posters for \$7.50 each. How much money did they spend? | | 8. _____ |
| | | 9. _____ |
| | | 10. _____ |

Problem of the Week

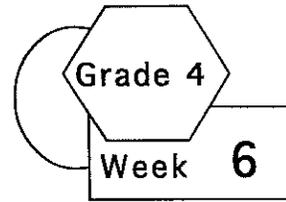
When the Centerville football team won the championship with a field goal in the last seconds of the game, they were ecstatic. The 11 members of the team ran around the field giving each other "high fives."

If each player gave each teammate a high five, how many high fives would be given altogether?

Explain your solution.



Week by Week Essentials Mathematics



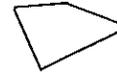
Calculate !

How old will you be if you live 1,000 weeks?



Keeping an Eye Out for Math

Cut out a quadrilateral.



Tear off the corners.

Paste the corners side by side so each corner touches the same point.

Try this for 2 other shapes and sizes of quadrilaterals.

Write about what happens.

Thinking Mathematically

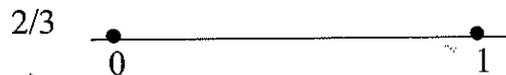
Work with a partner. Choose a number between 11 and 32. Take that many counters. Divide your counters into equal groups. Do this for at least 10 different size groups. Record your results on a chart like this:

Your #	# in Each Group	# of Group	Leftovers Remainder
30	4	7	2

For which size groups did you have no leftovers? Why do you think this is true?

Fraction Action

Put a dot on the number line to show where the fraction would be.



Exploring Data

Count the number of counties in each of the three North Carolina regions. Graph information on a circle graph. To make a circle graph, begin with a strip with one hundred squares. Use green to represent coastal plain counties, yellow - piedmont counties, and brown - mountain counties. Color a square for each county and roll the tape into a circle. From the center of the circle, draw a radius to the ends of each color section. What can you learn from your graph?

Multiplication Mark Off

Use a regular deck of cards to play this game. Let Aces = 1, Jacks = 11, Queens = 12, and Kings = 0.

Directions: Each player has 10 markers. At a turn, the player draws two cards and multiplies. If the product is uncovered on the board, the player may capture the spot. The first player to capture 10 spots wins.

12	20	16	40	18	27	64
100	36	4	56	24	30	12
63	0	49	72	25	8	48
48	10	60	0	14	26	9
54	32	27	35	56	49	21
30	16	63	40	144	18	72
42	28	15	60	81	6	24

Keeping Skills Sharp

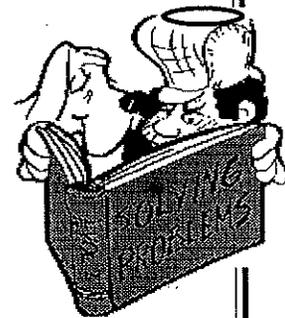
Write answers here:

1. $188 + 72 + 3405 =$
2. $2,678 - 499 =$
3. $45 \div 9 =$
4. $20 \div 4 =$
5. $8 \times 7 =$
6. 12 feet = ___ yards
7. Number of sides on 3 hexagons
8. Put $>$, $<$, or $=$ in box: 2,685 C 2,865
9. Cody gets \$5.00 for allowance each Saturday. On Monday, he bought a yo-yo for \$1.25. On Tuesday, he played 5 video games for \$0.50 per game. How much did he spend?
10. Does Cody have enough left to buy a poster for \$1.50?

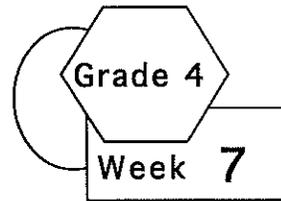
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Problem of the Week

List all the possible combinations of \$5.00 using 10 or fewer bills or coins.



Week by Week Essentials Mathematics



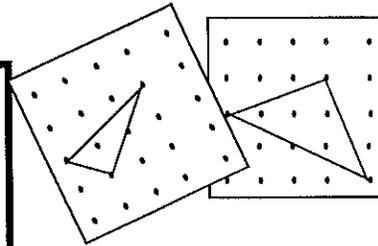
Calculate !

I am thinking of a number. When I add 55 to it and then multiply it by 2, I get 310. What is my number?

I am thinking about one number. If I multiply it by itself four times I get 625. What is my number?

Keeping an Eye Out for Math

Using a geoboard, how many different size right triangles can you make? Record your solutions on a geoboard recording paper sheet.



Thinking Mathematically

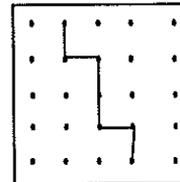
Write a story that is illustrated by this equation:

$$23 - 12 = 11$$

Fraction Action

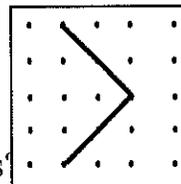
Divide a geoboard into halves in as many different ways as you can.

Draw your solutions on the geoboard recording sheet.



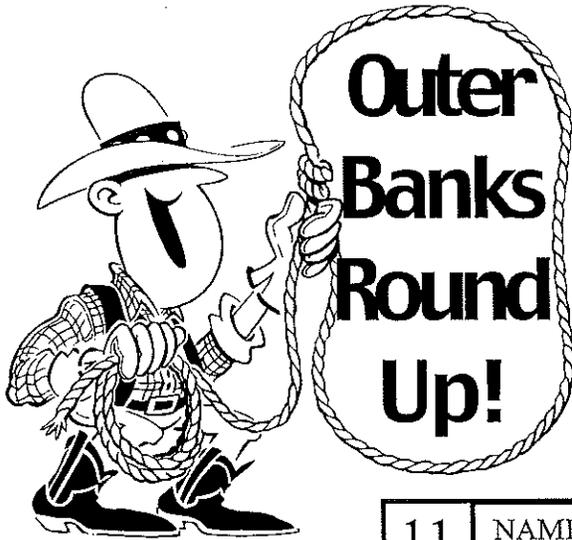
How many squares are in each half?

Is this geoboard divided into halves?



Exploring Data

Working with a partner, get a calculator. Have your partner time you for fifteen seconds as you count by ones by entering $1 + = = =$. Record your ending number. Time your partner for 15 seconds. Record that number. Survey your classmates and present the class data as a stem and leaf graph.



Outer Banks Round Up!

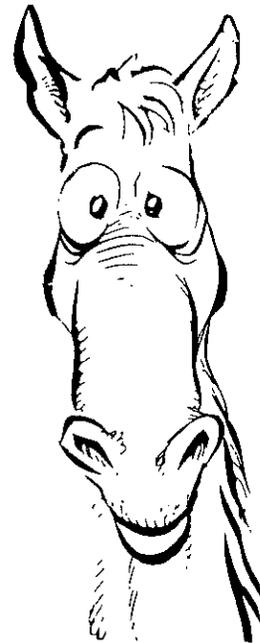
Remove aces and face cards from a regular deck of cards. Shuffle cards. Each player will draw one card and subtract from the target number given on each game. Record the answers on the game sheet.

14	NAME	NAME
GAME		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

11	NAME	NAME
GAME		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

15	NAME	NAME
GAME		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

The winner is the player who has the lowest total score for the ten rounds.



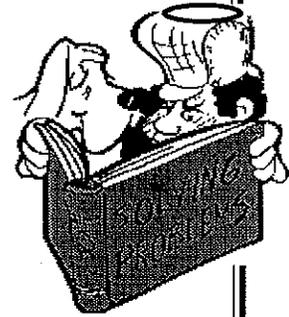
Keeping Skills Sharp

Write answers here:

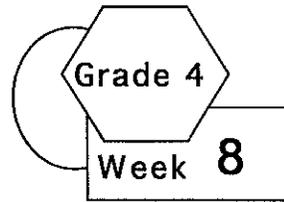
1. $8 + 22,042 + 398 + 25 =$
2. $8,203 - 6,892 =$
3. $3 \times 40 =$
4. $6 \times 3 =$
5. $56 \div 8 =$
6. Which figure is not a polygon:
a.  b.  c.  d. 
7. Nick had 3 quarters. He spent 40¢ for a popsicle. How much money did he have left?
8. $60,000 + 300 + 50 + 9 =$
9. Cathy and Judy bought some postcard packets. Altogether there were 48 cards. Cathy bought three packets with 8 cards each. The packets Judy bought had 12 cards in each. How many packets did Judy buy?
10. Each of the 6 teachers at Apple Valley School has 21 students. Next week 11 students are moving away. After they move, how many students will be left?

Problem of the Week

Cecil has a Mysterious Money Machine that will double any amount of money placed in it and add \$5.00 to the doubled amount. Yesterday, he placed a certain amount of money in the box, got a new amount, then placed the new amount back in the box. Then he had \$51.00. How much money did he first place in the Mysterious Money Machine?



Week by Week Essentials Mathematics



Calculate !

Calculate these equations:

$$9 \times 9 = n,$$

$$9 \times 99 = n,$$

$$9 \times 999 = n,$$

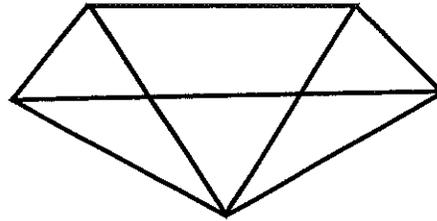
$$9 \times 9999 = n.$$

Can you predict $9 \times 99999 = n$? Use your calculator to check your prediction.

Keeping an Eye

Out for Math

- 1) How many triangles are in this pentagon?



- 2) Draw in the rest of the diagonals. Now how many triangles can you find?

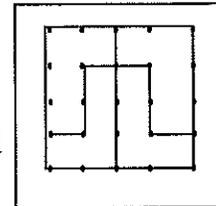
Thinking Mathematically

How many kernels of unpopped popcorn are in a level $\frac{1}{4}$ cup? How many cups of popped corn does this one $\frac{1}{4}$ cup yield? (First, estimate your answers, then experiment.) How many $\frac{1}{4}$ cups do you need to count to talk about the typical (average) number?

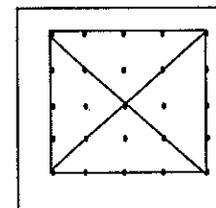
Fraction Action

Divide a geoboard into fourths in as many different ways as you can. Record your solutions on a geoboard record sheet.

How many squares are in each fourth?



How would you prove this geoboard is divided into fourths?



Exploring Data

Brainstorm ways in which a region's counties could be organized. (For example, alphabetize, square miles, date of origin, rural or urban, etc.) Choose a region, organize the counties in several ways and create interesting displays.

1. Each student needs a game board and at least 20 markers. The same brown bag is shared by all players.
2. Place one set of fraction bars in the bag. Each student takes a turn drawing a fraction bar from the bag and marking one fraction on his gameboard which is equivalent to the fraction shown on the fraction bar. After each turn, return the bar to the bag.
3. The winner is the first student to cover 4 in a row.

Beaufort Bingo



$\frac{1}{4}$	$\frac{3}{4}$	$\frac{2}{3}$	$\frac{1}{12}$	$\frac{3}{6}$
$\frac{1}{2}$	$\frac{5}{12}$	$\frac{1}{3}$	$\frac{2}{4}$	$\frac{2}{6}$
$\frac{4}{4}$	$\frac{0}{3}$	$\frac{4}{6}$	$\frac{3}{3}$	$\frac{3}{12}$
$\frac{10}{12}$	$\frac{2}{2}$	$\frac{8}{12}$	$\frac{5}{6}$	$\frac{4}{12}$
$\frac{7}{12}$	$\frac{0}{2}$	$\frac{9}{12}$	$\frac{1}{6}$	$\frac{11}{12}$

Keeping Skills Sharp

Write answers here:

1. $67,192 + 34,501 =$

2. $8,002 - 3,999 =$

1. _____

3. $32 \div 4 =$

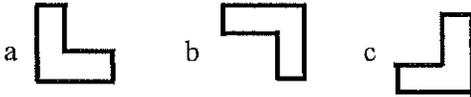
4. $64 \div 8 =$

2. _____

5. $5 \times 300 =$

3. _____

6. Which figure is the reflection (flip) of



4. _____

7. 2 gallons = _____ quarts

5. _____

8. Round to the nearest ten thousand: 378,402

6. _____

9. If each car will hold one driver and 5 students, how many cars will be needed to take Mrs. Wilson's 28 students on their field trip?

7. _____

8. _____

10. In the village of Etowah, there are 76 places to live. 18 are apartment buildings, the rest are houses. There are 32 brick houses. All other houses are wood homes. How many wood homes are there?

9. _____

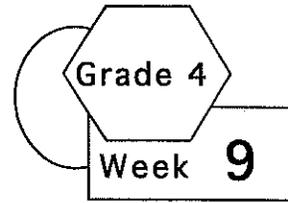
10. _____

Problem of the Week

How many different ways can you use these 5 digits (each number only once) and any operation to make 24?



Week by Week Essentials Mathematics

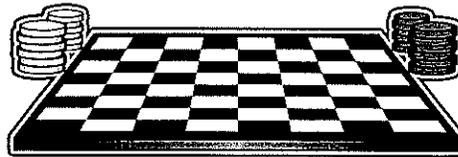


Calculate !

Would you rather have 37 quarters or 186 nickels?

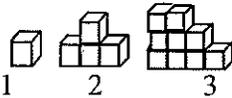
Would you prefer an allowance of \$450 a week or \$20,000 a year?

Keeping an Eye Out for Math



How many squares (of any size) are on a checkerboard?

Thinking Mathematically

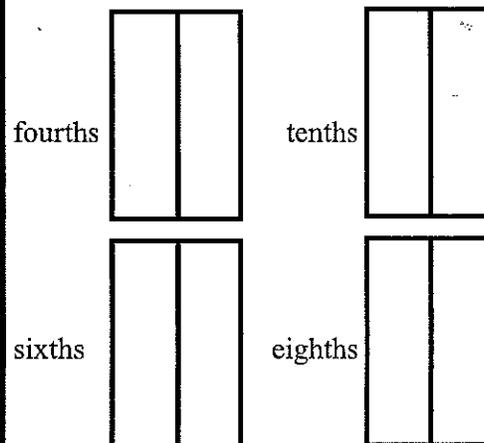


As these "buildings" grow, more blocks are needed. Build the buildings. Make a chart like this one. Fill in the chart. Predict the number of blocks needed for the 50th building. What is the rule?

Building Number	Number of Blocks Needed
1	1
2	4
3	9
4	16
...	

Fraction Action

These regions have been divided into halves. Draw lines to divide the whole figure into:



Complete:

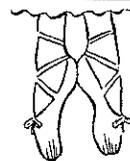
$$\frac{1}{2} = \frac{2}{4} \quad \frac{1}{2} = \frac{\square}{6} \quad \frac{1}{2} = \frac{\square}{10} \quad \frac{1}{2} = \frac{\square}{8}$$

Exploring Data

Do people in N.C. move about more today than they did a generation ago? Before collecting data, make a prediction. To begin the investigation record the information from these two questions: Are you growing up in the same area (town) as your mother did? Did your mother grow up in the same area as her mother did?

Use the data (yes and no responses) to create a double bar graph.

Multo Tic-Tac-Toe



Materials: Gameboard, different colored markers

Number of Players: 2 players

Directions: This game is played like Tic-Tac-Toe. Each player takes turns calling out the multiplication fact and product for any of the 81 small spaces. If correct, the player puts his or hers in the space. If a player makes a mistake, then the other player wins that space. When a player gets three small spaces in a row, column, or diagonal, he or she wins the larger square. The winner is the first player who wins three LARGE squares in a row, column, or diagonal.

x	3	5	7	x	2	7	9	x	8	5	9	x	3	4	7
4				3				3				6			
3				6				4				8			
6				2				2				5			
x	4	0	8	x	1	6	9	x	4	2	6	x	9	4	6
6				9				8				2			
8				5				4				7			
7				8				9				3			
x	5	9	1	x	0	3	7	x	0	4	8	x	6	7	3
5				9				7				4			
9				1				2				8			
7				8				3				2			
x	7	3	8	x	2	9	4	x	0	4	8	x	5	9	4
6				6				4				4			
7				8				6				6			
4				3				5				7			

Keeping Skills Sharp

Write answers here:

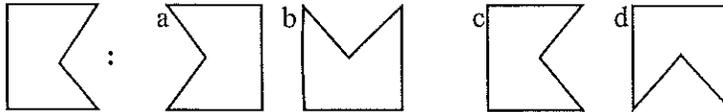
1. $6703 + 2197 + 4506 =$ 2. $4,607 - \underline{\quad} = 1,382$

3. $5 \times 7 =$

4. $3 \times 8 =$

5. $0 \times 6 =$

6. Which figure is a translation (slide) of this figure.



7. 1 mile = feet

8. Put $<$, $>$, or $=$ in the box:

$400 + 6,000 + 70 + 3 \square 300 + 6100 + 50 + 23$

9. On the first bus to the museum, 63 people arrived. On the second bus, 54 people arrived. 19 people left before lunch. How many people were still at the museum at lunchtime?

10. Jill and Brent planned a visit to the coast. They stopped in Wilmington for 23 days, and in New Bern for 19 days. How many weeks did they stay at the coast?

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

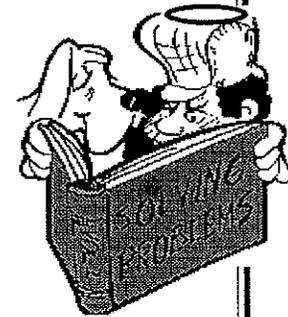
8. _____

9. _____

10. _____

Problem of the Week

Use the numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9 one time each to fill in these circles and make a true equation. One solution is $237 + 654 = 891$. There are over 300 solutions with 32 different sums. How many can you find?



$$\begin{array}{r}
 \bigcirc \bigcirc \bigcirc \\
 + \bigcirc \bigcirc \bigcirc \\
 \hline
 \bigcirc \bigcirc \bigcirc
 \end{array}$$