(1.03a, 1.06)

Fun with Multiplication

Save this much in 1 day	Save this much in 1 week	Save this much in 10 weeks
3¢	21¢	_____
5¢	_____	$3.50
7¢	_____	$4.90
_____	63¢	_____

Writing About Math

The school newspaper needs articles about math. Write an article that would explain palindromic numbers.

(5.01)

Let's Explore

If the green pattern block has a value of 75¢, what is the value of the following pattern blocks?

a. trapezoid

b. hexagon

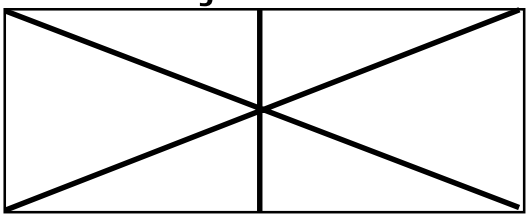
c. blue parallelogram

Using only trapezoids, triangles, blue parallelograms, and hexagons, build a design using at least nine blocks.

What is the value of your design?

(1.03a, 1.06)

Seeing Math



Triangles are worth three points each.
Rectangles are worth six points each.
Diagonals are worth nine points each.
What is the value of this figure?

(1.06, 3.01)

Let's Find Out

Larry has a red, a blue, and a green sweater. He has blue, black and tan pants. How many different outfits could Larry make? Record the outfits.

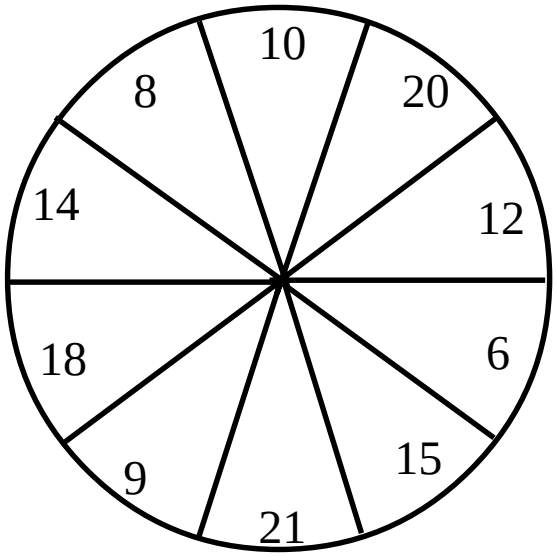
(4.02)

NO LEFTOVERS WANTED!

Number of Players: Two
Materials: Gameboard with spinner, pencil and paperclip for spinner, 21 color tiles or counters, one number cube
Directions: At each turn a player spins and takes that many counters to build an array. The player rolls the number cube to see how many equal rows the array must have. The number of tiles in one row is the player's score. The player's score is **double** the number of tiles in one row if there are no leftovers. Players record their score after each turn. The winner has the highest score after six rounds.

Player 1

Turn	# of counters	# of equal rows	# in each row	# of leftovers	SCORE
1					____
2					____
3					____
4					____
5					____
6					____



Player 2

Turn	# of counters	# of equal rows	# in each row	# of leftovers	SCORE
1					____
2					____
3					____
4					____
5					____
6					____

(1.03a, 1.06)

Keeping Skills Sharp

1. 1,120 + 2, 341 = ___

2. 951 - 280 = ___

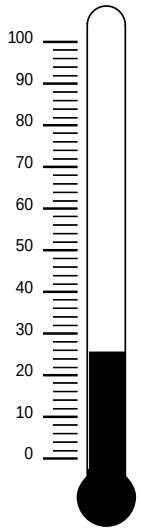
3. 4 x ___ = 32

4. A box of Crunchy Doodles cost $6.30. Terry has $18.46. How much more money does she need to buy three boxes?

5. Scott is taller than Tyler. Lisa is shorter than Tyler. Charlie is the tallest. Who is the shortest?

6. Monique has eight chips in a bag. Three of the chips are red. What fraction of the chips are red?

7. Look at the thermometer. What is the temperature?



8. Linda's dancing lesson starts at 4:30. It lasts for 35 minutes. What time does her lesson end?

Solve this!

Mr. Taylor will pay you 75¢ an hour for helping around his store after school. Plan and show a work schedule for one week. (You can choose to work on the weekend if you like.)
How many hours will you work?
How much will you earn?

(1.03a, 1.06)

To the Teacher

Grade 3
WEEK 29

Fun with Multiplication:

3¢	**21¢**	**$2.10**
5¢	**35¢**	**$3.50**
7¢	**49¢**	**$4.90**
9¢	**63¢**	**$6.30**

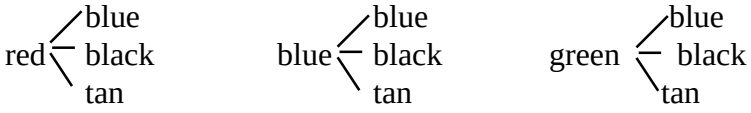
Seeing Math:
Answer: 69 points (ten triangles @ 3 points, three rectangles @ 9 points, two diagonals @ 6 points)

Writing in Math:
Refer to Teacher to Teacher "Let's Explore" in Week 27 for explanation of palindromes.

Let's Explore:
Provide pattern blocks for students to use in modeling fractional parts and calculators for the computation.

Let's Find Out:
Students might use color cubes or cut-outs to explore the combinations. The recording might be written in words or illustrated with crayons.

Answer: Nine outfits



Mental Math

Directions to Students: Number your paper from 1 to 8. Write your answers as the questions are called out. Each question will be repeated only once.

One half of 50

Three quarters less than $1.00

What comes next ... 702, 704, 706, ___?

How many minutes would it take to walk around the school?

26 - 10 - 10 + 8

80 - 47

Estimate the weight (in grams) of a carton of milk from the cafeteria.

Number of cups in a qt.

Keeping Skills Sharp

3,461

Lisa

671

three-eighths

8

26º

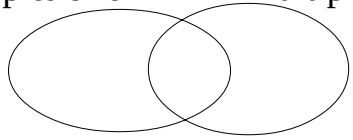
44¢

5:05

(1.03a, 1.06)

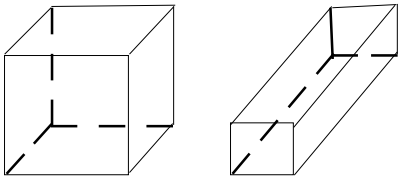
Fun with Multiplication

Multiples of 6 Multiples of 4



Put four multiples of 4,
four multiples of 6, and four multiples of both 4 and 6 in the Venn diagram

Writing About Math



Describe how these geometric shapes are alike and how they are different. Show on a "T" chart.

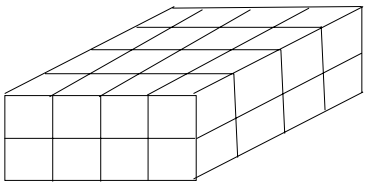
(3.01)

Let's Explore

Cory had a bag of marbles. He had more than 12 but fewer than 32. When he counted his marbles by fours, he had two left over. When he counted them by fives, he had one left over. How many marbles did he have?

(1.03a, 1.06)

Seeing Math



How many cubes were used to build this rectangular prism? If another layer is added, how many cubes would be in the prism?

Explain how you know.

(1.03a, 1.06, 3.01)

Let's Find Out

How many make a gallon?

cups?

half-pints?

pints?

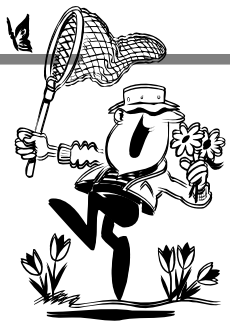
quarts?

half-gallons?

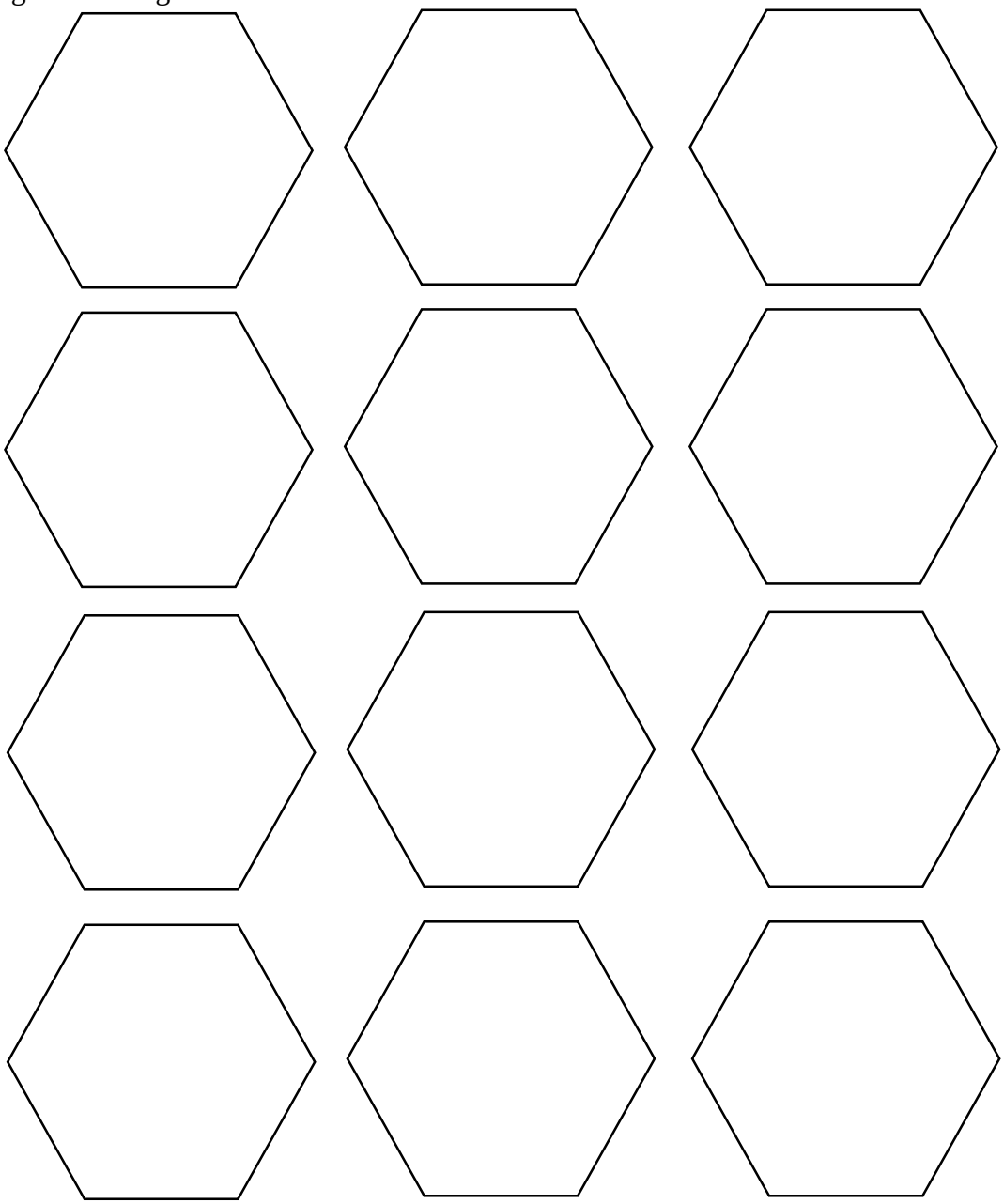
Show your findings in a graph.

(2.02a, 4.01)

CAPTURING HEXAGONS



Number of Players: Two - four
Materials: One gameboard per player, pattern blocks, crayons, game cards, (Blackline Week Thirty)
Directions: Shuffle cards. Decide who goes first. In turn, each player draws a card and places pattern blocks on gameboard equal to the exact amount on the card. Players should be encouraged to trade up whenever possible, thus always having the fewest number of pattern blocks on their gameboard. When a player captures an entire hexagon, the player can cover it with a hexagon block or color the hexagon shape. The winner is the first player to capture all hexagons on his gameboard.



(1.03a, 1.03c)

Keeping Skills Sharp

1. 385 + 434 = ___
2. 714 - 306 = ___

3. 7 x ___ = 21

4. Two markers cost 75¢ each and one tablet costs 95¢. If you give the store clerk 2 dollar bills, 1 quarter, 2 dimes and 1 nickel, is that enough money? Show why.

5. 6:45 is the same time as ___ minutes before 7:00.

6. Which shape is a plane figure?
   a. cube b. square c. prism

7. 2 dollar bills, 5 quarters, 3 dimes, 2 nickels, 12 pennies.

8. The zoo received 24 tropical birds. The keeper put an equal number of birds in four cages. How many birds did he put in each cage?

Solve this!

The local post office has run out of 37¢ stamps. The only stamps left are 2¢, 3¢, and 4¢. How many different combinations of stamps can be used to make 37¢?

(1.03a, 1.06)

To the Teacher

Grade 3
WEEK 30

Fun with Multiplication:
Venn diagrams are a useful problem solving strategy to show similarities and differences. Students need to have knowledge of how to display information on a Venn diagram.

Seeing Math:
Thirty-two cubes were used to build the rectangular prism. When another layer is added, 16 more cubes would be needed. There would be 48 cubes in three layers. Have children explore additional layers.

Writing About Math:
"T" charts help children show information in an organized way.

alike	different

Let's Explore:
Answer: 26 marbles
Suggest that children make a list of multiples of four and five between 12 and 32.

Solve This:
Encourage students to make a chart or organized table. Some solutions:

2¢	5	7	9	11	13
3¢	1	1	1	1	1
4¢	6	5	4	3	2

Mental Math

Directions to Students: Number your paper from 1 to 8. Write your answers as the questions are called out. Each question will be repeated only once.

8 ÷ 2

100 + 30 + 15 - 10

Two dimes less than $1.00

39 + 29

What time comes next ...
1:15, 1:30, 1:45, ___?

3 x 5 + 4 + 100

Ten minutes after 4:55

? of ft in 6 yds

Keeping Skills Sharp

819

15 min.

408

b

3

$3.77

yes $2.50
- 2.45
$0.05

6 birds

Fun with Multiplication

Function Machine	
In	Out
4	32
___	16
5	___
6	48
___	24

Fill in the blanks in the Function Machine chart.

What rule did the Function Machine use?

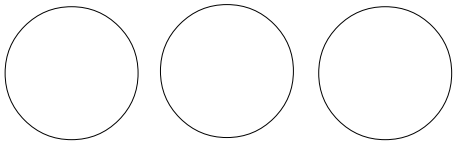
(1.03a)

Writing About Math

Choose one of the equations below. Write a story.

7 x 8 = 56 56 ÷ 8 = 7
8 x 7 = 56 56 ÷ 7 = 8 (1.06)

Let's Explore

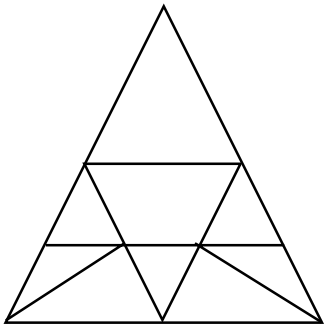


How would you cut three pizzas to share them equally among four people? Show your work in words and drawings. Record the amount each person will receive.

(1.02a, 1.06)

Seeing Math

How many triangles can you find?



Create a new triangle puzzle.

(1.03a)

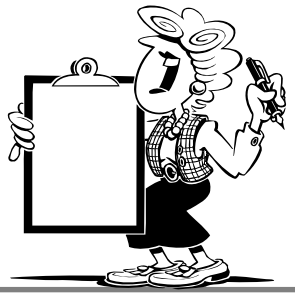
Let's Find Out

(1.03a, 2.01a)

Write as many tallies as you can in one minute. How many did you write?

How long would it take you to write 1,000 tally marks?

Explain your thinking.



Murphy To Manteo

Materials: You and your partner need a gameboard, a number cube and a small marker each.

Manteo

Go Back 3	49÷7	64÷8		42÷7	5÷5	Go back 6		27÷3
56÷8		72÷8		48 ÷ 6		21÷7		36÷6
81÷9		40 ÷ 5		36÷4		48÷8	32÷4	40÷8
45÷9		8÷2		24÷3				
12÷3		42÷6		16÷4				
6÷1		90÷9		27÷9	28÷4	Lose a turn		
30÷6	59÷9	9÷3	54÷6			4÷4		
			Lose a turn	18÷6	15÷3		63÷7	
					56÷7		8÷1	
					Go back 5	42÷7	16÷8	

Murphy

Directions: Players roll the cube to determine the number of spaces to advance. The player must answer the problem correctly in each space passed as the marker is moved forward. If an error is made, the player must return to the starting place for that turn. Players take turns. The first player who crosses the state and comes to the END space wins.

(1.03)

Keeping Skills Sharp

1. 3,432 + 167 = ___
2. 4,687 - 1,543 = ___

3. 8 x ___ = 56

4. Spot weighs 82 pounds. Fido weighs 69 pounds. How much less does Fido weigh than Spot?

5. Chris stayed at the art museum for two hours. Her travel time was a half hour there and a half hour back home. She got home at 4:30. What time did she leave home?

6. Marcie bought an eraser for 29¢ She gave the store clerk two quarters. She received three coins in change. What could the 3 coins be?

7. 7 thousands, 11 hundreds, 2 tens, 12 ones.

8. Balloons sell for 7¢ each. How much would nine balloons cost?

Solve this!

Jose has three sweaters: red, green, and blue. He has three pairs of long pants: brown, black and grey. How many different outfits can Jose have? Show how you know.

If Jose selects a sweater and pants in the dark (without looking), what is the probability that he selects a red sweater and grey pants?

A brown or black pants and a blue sweater?

(4.03)

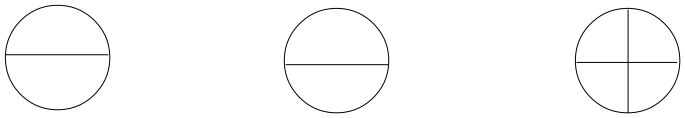
To the Teacher

Grade 3
WEEK 31

Writing About Math:
Have students share stories in teams. Each team should choose one story to share. Class members give the matching equation.

Seeing Math:
twelve triangles

Let's Explore:
Students may divide two pizzas into halves and divide the third pizza into fourths.

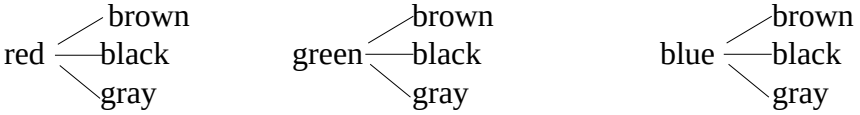


OR They may divide each pizza into fourths. Students should record to show the amount for each person. Either way each student gets thre-fourths of a pizza.

Solve This:

9 outfits

$\frac{1}{9}$: $\frac{2}{9}$



Mental Math

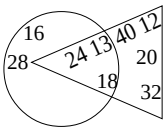
Directions to Students: Number your paper from 1 to 8. Write your answers as the questions are called out. Each question will be repeated only once.

6 x 8	300 + 50 - 10 + 3
Number of minutes in three-fourths of an hour	495 + 10
What time comes next ... 4:45, 4:50, 4:55, ___?	8 x 2 - 10 - 4
Ten minutes before 3:45	Number of sides in 3 trapezoids

Keeping Skills Sharp

3,599	1:30
3,144	2 dimes 1 penny
7	8,132
13 lbs.	63

Fun with Multiplication



A. Which multiples of three are in both the triangle and the circle?

B. Which multiples of eight are in the triangle but not the circle?

(1.03a)

Writing About Math

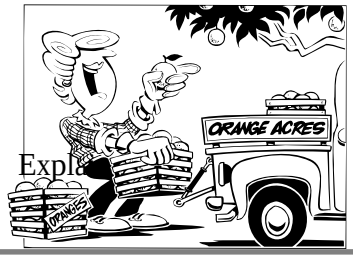
Is dividing nine books into three equal groups the same as dividing three books into nine equal groups? Explain how you know.

Use numbers, words and pictures.

(1.03a)

Let's Explore

Keisha had a box of oranges. She divided the oranges evenly among herself and four other friends. When she shared them equally with her friends, there were three left over. How many oranges were in the box?

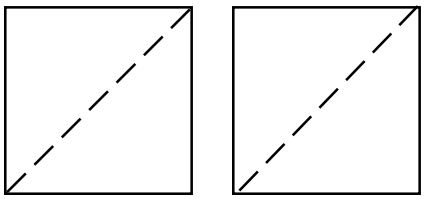


List several possible answers. Do you see a pattern? Explain.

(1.06, 1.03a)

Seeing 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.

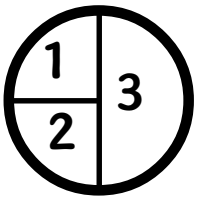


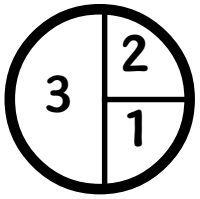
(5.01)

Let's Find Out

If each spinner is spun once and the two numbers are added, what sum will occur most often? least often?

Try this twenty times and see if you change your mind.





(4.01)

CUT A RUG

Number of Players: Two
Materials: Centimeter grid sheet for each player (Blackline available), pair of number cubes, recording sheet for each player
Directions: Players take turns. During a turn, a player tosses a pair of cubes, finds the sum of the two numbers and constructs a rectangle on the centimeter grid by marking length (horizontal) by the first sum and width (vertical) by the sum of the numbers on the second toss. The player outlines the entire rectangle, colors it in and records the length, width and distance around. Highest score wins!

	Length	Width	Distance Around
Round 1			
Round 2			
Round 3			
			Total Score

(2.02)

Keeping Skills Sharp

1. 4 x 6 + 200 - 3 = ___ 2. 1,698 + 46 - 162 = ___

3. 7 x 20 = ___

4. How many rectangles?

5. How many diagonals does an octogon have?

6. What is the value of the 1 in 801,462?

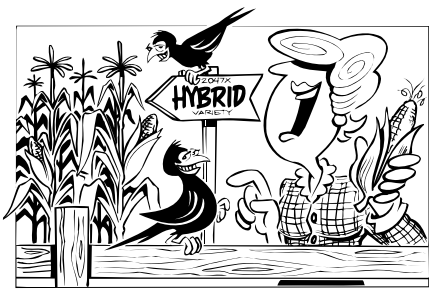
7. Which fraction is largest?

a.	b.	c.	d.
$\frac{7}{4}$	$\frac{9}{8}$	$\frac{6}{4}$	$\frac{5}{3}$

8. Samuel made a pictograph to show his friends' favorite soda. Each circle he drew on the pictograph stood for 4 friends. If 20 friends choose orange soda, how many circles should he make for orange soda?

Solve this!

Alice planted one-half of her garden with tomatoes. She planted one-fourth of her garden with beans. She planted one-eighth of her garden with corn and another one-eighth with lettuce. She planted 32 plants altogether. Draw a picture of her garden. Be sure to draw the plants where they belong.



(1.03a, 1.03c, 1.06)

To the Teacher

Grade 3
WEEK 32

Fun with Multiplication:
A. 24 and 8 B. 32 and 40

Students need experience to begin developing concepts related to common multiples.

Writing About Math:
Students should use objects to model. This will also help them draw pictures as part of their explanations.

Let's Explore:
Collect possible answers from students on board or overhead.
Possible answers: 8, 13, 18, 23, 28, etc. Develop the idea that three more than any number times five will work for the oranges. Discussion could occur related to size of the box and reasonable answers for different size boxes. Children may want to count and graph numbers in different size boxes.

Mental Math

Directions to Students: Number your paper from 1 to 8. Write your answers as the questions are called out. Each question will be repeated only once.

0 x 10	5 + 20 - 4 + 200
Four dimes and three nickels less than $1.00	39 + 24
What comes next ... 100, 96, 92, ___?	3 x 10 + 4 + 200
Fifteen minutes after 8:30	Number of days in June

Keeping Skills Sharp

221	a
1,582	1,000
140	b
19	5