



Fun with Multiplication

What number was doubled to get 30?
46? 66? 700?

If you double a whole number, can you
get an odd number?

Explain your answer. (1.03a)



Writing About Math

Write a story to illustrate the
number sentence:

$$42¢ + 37¢ + 23¢ = \$1.02$$

(1.06)



Let's Explore

Two bags of candy were shared by the
girls and the boys. Each girl got three
pieces of candy, with one piece left over.
Each boy got exactly five pieces of candy.

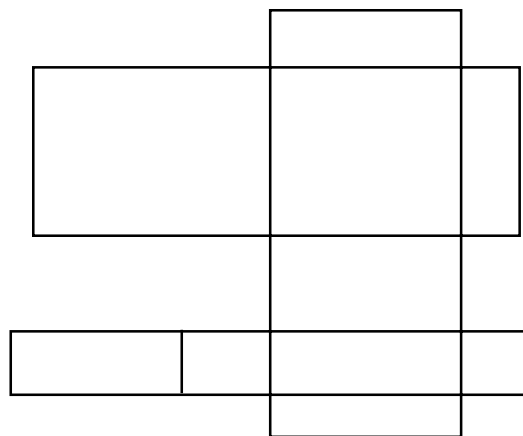
If each bag had the same amount of
candy, how many girls and how many
boys are sharing the candy?

(1.03a, 1.06)



Seeing Math

How many different rectangles can you
find in this figure?



(3.01)



Let's Find Out

- Scoop up a double handful of pattern blocks. Create a graph to show how many of each block you scooped up.
- Remember to put a title and labels on your graph.
- Compare your graph with a friend's graph.

(4.01)

MULTIPLE MADNESS



Number of Players: Two

Materials: One gameboard per pair, counters or cubes of two different colors, two paperclips

Directions: To start the game the first player places the 2 paper clips on any factors. Both paper clips can be on the same factor to allow for doubles. Player covers the product with his color counter. The second player must move 1 paper clip to a different factor. This player covers the product with his color counter. Players alternate moving a paperclip and covering the product with their color counter. The winner is the first to cover four products in a row.

1	2	3	4	5	6
8	9	10	12	15	16
20	25	1	2	3	4
5	6	8	9	10	12
15	16	20	25	1	2
3	4	5	6	8	10

1

2

3

4

5

(1.03a)



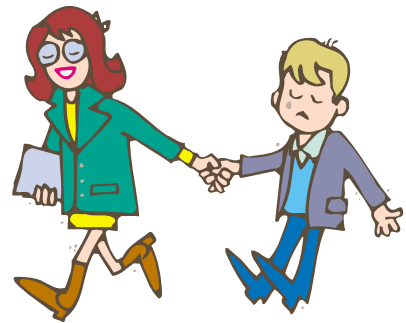
Keeping Skills Sharp

- $239 + \square = 452$ 2. $700 - 169 = \square$ 3. $1464 + 579 = \square$
- Dean bought six gumdrops at 5¢ each and four lollipops at 10¢ each. He paid with \$1.
How much change did he get back?
- Fifty minutes after 7:30
- Write these numbers in order from largest to smallest:
 $\frac{3}{4}$ $\frac{3}{6}$ $\frac{2}{3}$ $\frac{3}{8}$
- 13 hundreds, 12 tens, and 13 ones.
- In the basketball game, Dan scored 9 two-point goals, Marquitus scored 6 two-point goals, and Baxter scored 8 two-point goals.
How many points did their team score?



Solve this!

How many years will it take to have 1000 days?



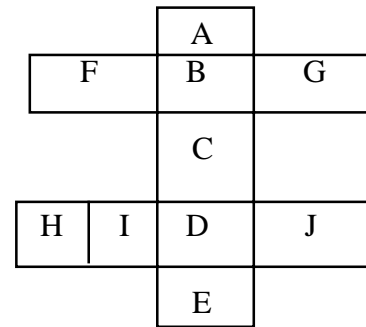
One school year is about 180 days. If a student has not repeated or skipped a grade, about how many days will a student be in school from kindergarten through fifth grade?

(1.06)

To the Teacher ..

Seeing Math:

10 single rectangles: (A, B, C, D, E, F, G, H, I, J)
 9 double: (AB, FB, BG, BC, CD, DE, DJ, ID, HI)
 6 Triple: (ABC, BCD, CDE, FBG, HID, IDJ)
 3 quadruple: (HIDJ, ABCD, BCDE)
 1 quintuple: (ABCDE)
 29 total rectangles

**Let's Explore:**

Eight girls and five boys.

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.

$7 \times 5 + 10$

$250 + 100 + 2$

Number of corners in four squares

4 hundreds, 6 tens, and 3 ones

What comes next ... 995, 990, 985, 980, _____?

100 more than 704

Value of two quarters and one nickel

Number of children in five sets of triplets

Keeping Skills Sharp

213

8:20

531

$\frac{3}{4} \frac{2}{3} \frac{3}{6} \frac{3}{8}$

2043

1433

30¢

46 pts.



Fun with Multiplication

Fill in the chart.

YARDS	FEET	INCHES
1 yard	3 feet	36 inches
2 yards	___feet	___inches
3 yards	___feet	___inches
4 yards	___feet	___inches

Explain how you found your answers.

(2.01b, 5.01)



Writing About Math

Write everything you know about 24.

(1.01a)



Let's Explore

If $8 \times * = 401$,

what is the value of $93 + * ?$

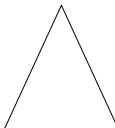

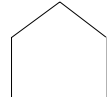
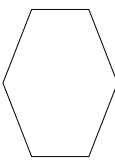
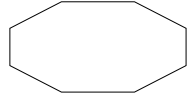
How about $70 - * ?$

(5.01)



Seeing Math

Draw all possible diagonals for each of the following polygons.

- a. 
- b. 
- c. 
- d. 
- e. 

(3.01)



Let's Find Out

About how many pennies would you need to make a line of pennies

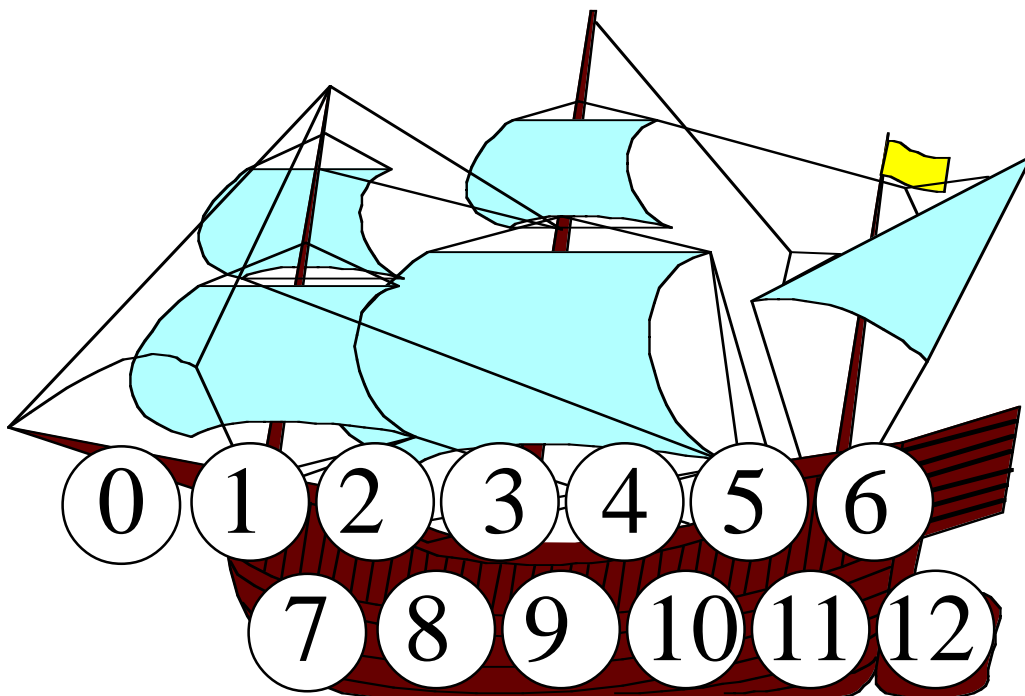
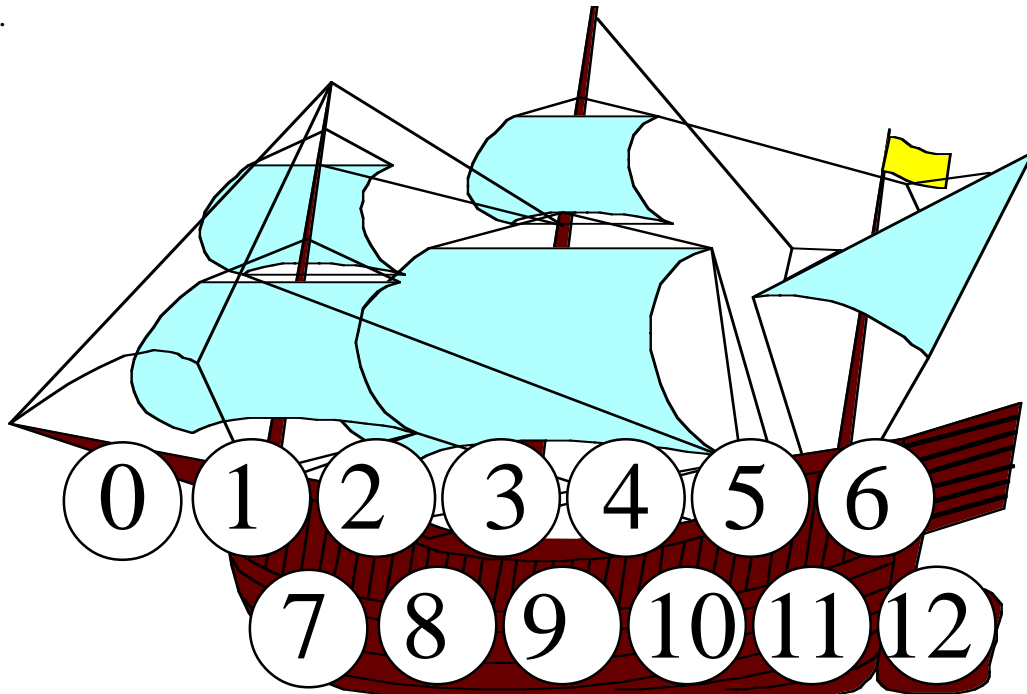
the length of a football field?



(2.01b)

Pamlico Pirates Reappear

Directions: Each player, pirate or naval officer, needs 13 markers. At a turn, players roll 2 number cubes and add, subtract, multiply or divide. A player may cover only one number at a turn. If all possible responses are covered, the player loses the turn. Winner is the first to cover all numbers.



(1.03a)



Keeping Skills Sharp

- $\square + 1126 = 4526$
- $\$2.89 - \square = \$.58$
- $85 + 75 = \square$
- Which is greater? 3 dollars, 1 nickel and 3 pennies or $395¢$?
- Twenty minutes after 4:30.
- Which fraction is largest?
a. $\frac{2}{6}$ b. $\frac{2}{3}$ c. $\frac{2}{4}$
- 4 thousands, 13 hundreds, 4 tens, 9 ones
- Dragon flies have four wings. The additional wings help them fly better. How many wings would be on eight dragonflies?



Solve this!

I have a collection of 30 coins that consists of nickels and quarters. If the total value of the coins is $410¢$, how many of each kind of coin do I have?



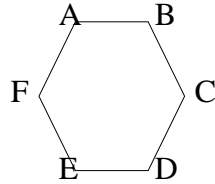
(1.06)

To the Teacher ..

Seeing Math

A triangle has no diagonals, a rectangle has 2, a pentagon has 5, a hexagon has 9 and an octagon has 20. Students may need to make an organized list.

For example:



AC	BD	CE	DF
AD	BE	CF	
AE	BF		

Writing About Math:

Encourage children to really expand their thinking about 24. (Number in two dozen, number of legs on four insects, etc.) Post the responses and add to the chart as new ideas are presented. This should encourage more creative thinking.

Let's Find Out:

Provide students with rulers, pennies, calculators and reference sources for units of measure as well as the dimensions of a football field. Students should solve this problem using customary measurement.

Solve This:

Answer: 17 nickels, 13 quarters

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.

$135 - 20$

$14 + 10 + 10 - 3$

Number of pennies in nine nickels

43 tens + 4 hundreds

What comes next, ... 42, 32, 22, ___?

10 less than 201

Thirty minutes before 6 o'clock

Number of centimeters in 4 meters

Keeping Skills Sharp

3400

4:50

\$2.31

b

160

5,349

395¢

32 wings



Fun with Multiplication

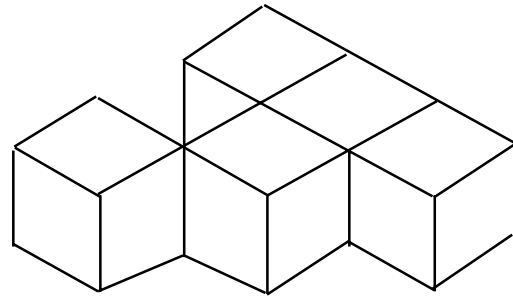
What numbers could have been rolled on two number cubes to get each of the following products?

Product	Die #1	Die #2
24		
12		
15		

(1.03a)



Seeing Math



If you paint this figure, how many faces will you paint?

(3.01)



Writing About Math

Make a list of all items that are shaped like a cube. How do you know each is a cube?

(3.01)



Let's Explore

Use a calculator to determine how old you would be if you lived 1,500 days. How many weeks? How many months?



(1.03a, 1.06)



Let's Find Out

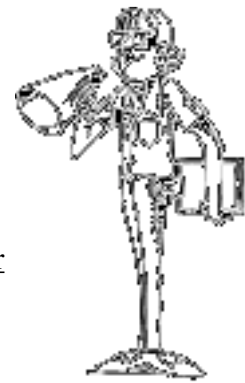
Jose has \$1 in coins with no pennies. What are the possible combinations of coins he might have?

Make a list or chart.

Which way is your favorite?

(1.06)

SAKES ALIVE, GO FOR FIVES!!



Number of Players: Two or three

Materials: Gameboard, two number cubes, colored counters for each player

Directions: Each player in turn rolls the number cubes and covers the product or any two factors of the product. If the product of factors has been covered, the player loses a turn. The first player to cover five squares in a row vertically, horizontally or diagonally wins the game.

24	5	16	3	18	2	20	12	4
4	8	6	12	4	3	25	5	8
18	1	36	4	30	5	24	3	2
12	18	2	5	16	6	1	9	4
25	3	2	20	4	5	3	8	25
5	9	1	15	5	18	6	12	1
8	3	5	4	24	3	2	24	6
2	30	25	6	2	8	4	9	3
15	1	20	9	18	3	6	24	36

(1.03a)



Keeping Skills Sharp

1. $75 + \square = 395$ 2. $\square - 130 = 180$ 3. $246 + 246 = \square$
4. Isaac and Tanika are building a ramp for skateboarding. They need four boards, each exactly 24 inches long. How many feet of board do they need?
5. 2 quarters, 3 dimes, 2 nickels, 4 pennies are worth how much?
6. Ten minutes before 6:30
7. Write 6,308 in expanded form.
8. If $6 \times 1000 + 3 \times 100 + 8$ video games are on sale and 1279 are sold. how many are left?



Solve this!

You have 100 pennies, 100 nickels, and 100 dimes. Using at least one coin of each type, select 21 coins that have a total value of exactly \$1. How many coins of each type did you select?



To the Teacher ..

Fun with Multiplication:

Use a pair of number cubes labeled 1 to 6.

Let's Explore:

Knowing when to use a calculator is so important for students to know. Ask them to name other times using a calculator would be appropriate.

Let's Find Out:

Provide plastic coins for students who need to use them. Encourage students to design a list or chart to record their findings. Observe to see whether they work randomly or use an organized method to discover possibilities. Possible chart might include.

half dollar	quarters	dimes	nickels
2	0	0	0
1	2	0	0

Solve This:

Answer: 5 pennies, 13 nickels, 3 dimes
or
10 pennies, 4 nickels, 7 dimes

Mental Math

$$4 \times 4 + 20$$

Number of legs on
2 octopuses + 10

What comes next ... 100, 150,
200, ____?

Number of hours in two days

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.

$$500 - 100 + 50$$

22 tens + 12 ones

100 less than 1765

Number of cups in a qt.

Keeping Skills Sharp

320

310

492

8 feet

94¢

6:20

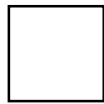
6000 +
300 + 8

5029



Fun with Multiplication

If you had four of each of the polygons below, how many angles would you have altogether?



(1.03a)



Writing About Math

$$12 + \square = 28 \quad \square + 9 = 35$$

Complete the equations.

Explain how you found the missing numbers.

(5.03, 5.04)



Let's Explore

What is the weight of your snacks?

Work in groups of four. Save wrappers or containers from your snacks for three days. Use a scale to weigh snacks that do not come in packages with labels.

Figure out the total weight of your group's snack for three days. How can you share your findings?

(2.02c)

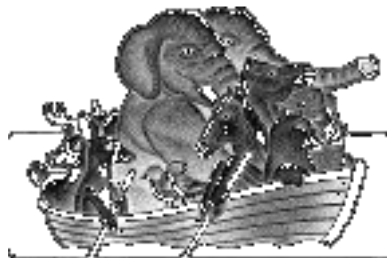


Seeing Math

Using a hundred board, how many numbers can you find between 1 and 100 that fit both clues?

Clue 1: The product of the digits is greater than 12.

Clue 2: The product is even.



(5.01, 1.03a)



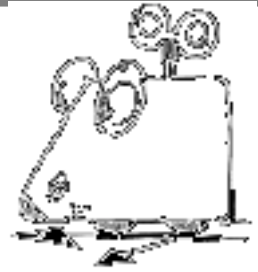
Let's Find Out

If $a = 1\text{¢}$, $b = 2\text{¢}$, $c = 3\text{¢}$ etc., how much is your name worth? Find ten words with the same value as your name.

In your class how many students' names have the same value? Graph the students' names according to their values.

(1.06)

I GET AROUND!

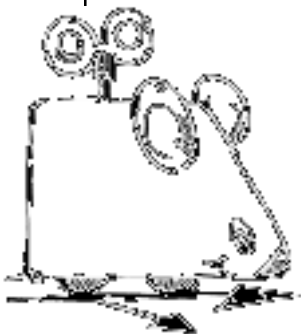


Number of Players: Two

Materials: Centimeter grid sheet for each player (Blackline Master available), number cubes, recording/score sheet




Directions: Players take turns. During a turn, a player tosses the number cubes and constructs a rectangle on the centimeter grid by marking length on a horizontal line according to the number thrown on one cube and width according to the number on the other cube. The player then outlines the entire rectangle, colors it in and records length, width and perimeter on score sheet. After four rounds, a total score is determined by the sum of the perimeters. Highest score wins.

	Length	Width	Perimeter
Round 1			
Round 2			
Round 3			
Round 4			
			Total Score





Keeping Skills Sharp

1. $__ + 450 = 1050$ 2. $345 - __ = 200$ 3. $__ \times 5 = 30$
4. The cost to get in the County Fair is \$5 for adults. Children ages of 6-12 cost \$3. Children under five are admitted free. You are eight, your brother is six, and your sister is four. How much will it cost for you, your brother and sister and your mom and dad?
5. Abby is 58 days old. Fluffy is 1 month old. Puff is 10 weeks old. Put the kittens in order from the oldest to the youngest.
6. Twenty-five minutes after 4:30
7. Look at the clocks. Which one shows a time that the hands form a right angle?
a.  b.  c. 
8. If you add two odd numbers will your sum be an even or odd number? Write a problem of your own to prove your answer.



Solve this!

How many times does the digit 3 occur between 1 and 100? Use a hundred board or find a pattern to figure this out.

How many times does the digit 3 occur between 100 and 1000?



To the Teacher ..

Fun with Multiplication:

Students should come to understand that the number of angles corresponds to the number of sides of each polygon. (52 angles)

Seeing Math:

Encourage students to see the pattern that evolves when using a hundred board.
(Blackline #1 has hundred boards)

Let's Explore:

Provide a kitchen scale or a balance with standard weights. Calculators and references for weight measure should be available. Encourage students to be creative in ways to share their findings (poster, story, etc.).

Writing About Math:

Finding the missing addend is an important concept for developing algebraic thinking. Substituting a letter such as X or Y for the missing addend box helps students realize that the unknown part can be represented in many ways.

Let's Find Out:

A pictograph or a line plot would be appropriate. A group of students could display the data in each form in order to compare.

Solve This:

Answer: 3 appears 20 times between 1 and 100, 281 times between 100 and 1000.

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.

3×8

$16 - 8 + 50$

Today is Tuesday, the 10th.

14 ones and 2 hundreds

Two weeks from today is ___?

What comes next ... 635, 637, 639, ___?

1000 less than 7283

Fifteen minutes before 10 o'clock

Number of days in February

Keeping Skills Sharp

600

Puff, Abby, Fluffy

145

4:55

6

b.

\$16.00

even