

# SUNSHINE MATH - 3

Mars, I

Name: \_\_\_\_\_

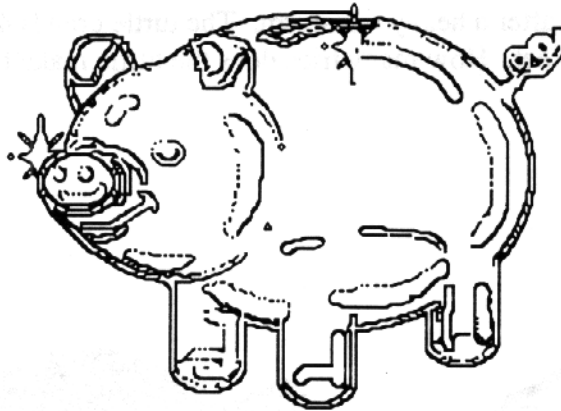
(This shows my own thinking.)

- ★ 1. Ann was asked to find the number of marbles that were added to the other marble groups to get the total. Can you find the number?

$$3 \text{ marbles} + \underline{\hspace{2cm}} \text{ marbles} + 2 \text{ marbles} = 13 \text{ marbles.}$$

Answer:            marbles

- ★★ 2. Joe has 3 quarters, 1 dime and 2 nickels in his piggy bank. How much money does he have to spend in the candy store?



Answer:            cents

- ★★ 3. Tom is helping his sick neighbor by taking her dog for a walk every day, bringing her the mail, and doing other odd jobs. Mrs. Burns pays him \$7.50 a week for his help. How much will he earn in 4 weeks?

Answer:           

- ★★★ 4. Find the pattern in these numbers and then continue the pattern by writing the next three numbers.

1    6    3    8    5    10    7

- ★★★ 5. Robin gave her friend a puzzle like the one below. Solve the number puzzle yourself!

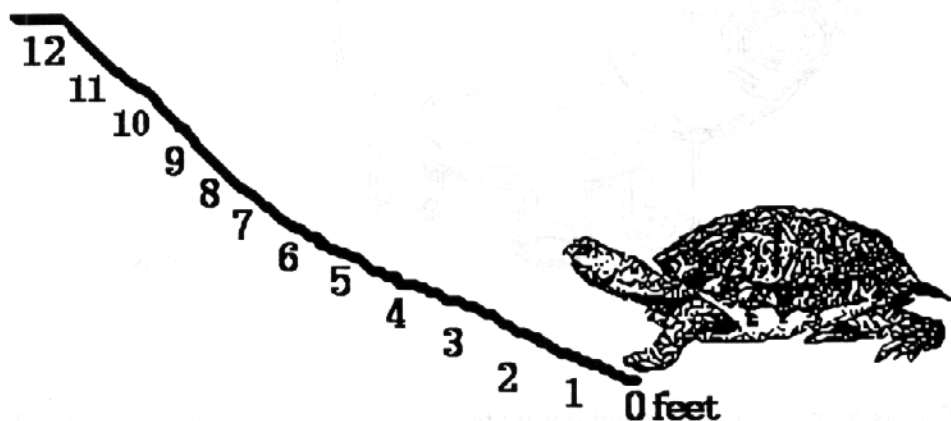
Find  $*$  + 11 if you know that  $8 + * = 12$ .

Answer:  $* + 11 =$  \_\_\_\_\_

- ★ 6. There was a line waiting for movie tickets. Sue realized that there were 6 people in front of her and 6 people behind her in the line. How many people were waiting in line for movie tickets?

Answer: \_\_\_\_\_ people

- ★★★★ 7. A turtle crawls up a 12 foot hill after a heavy rainstorm. The turtle crawls 4 feet, but when it stops to rest, it slides back  $1\frac{1}{2}$  feet. How many tries does the turtle make before it makes it up the hill?



Answer: \_\_\_\_\_ tries

- ★★ 8. Four classmates are to stand in order from tallest to shortest. Tom is taller than Sally. Sally is taller than Bob. Maria is taller than Bob but shorter than Sally. Using the clues, place the four friends in order from tallest to shortest.

Answer: Tallest \_\_\_\_\_ Shortest \_\_\_\_\_

# SUNSHINE MATH - 3

## Mars, II

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★★★★ 1. Use the rule given. Write the missing numbers.

Rule: If  $x$  is a number in column A, then  $x - 7$  is beside it in column B.

A	B
14	
7	
24	
	1

- ★★ 2. One way to add numbers mentally is to add the tens together first, followed by the ones. For example, to find  $43 + 25$ , you might do this:

$$40 + 20 = 60$$

$$60 + 5 = 65$$

$$65 + 3 = 68$$

Practice these problems using this way to add. You will be asked to work a problem mentally when you turn in your paper.

$$47 + 22 = \quad 56 + 45 = \quad 43 + 27 = \quad 44 + 27 =$$

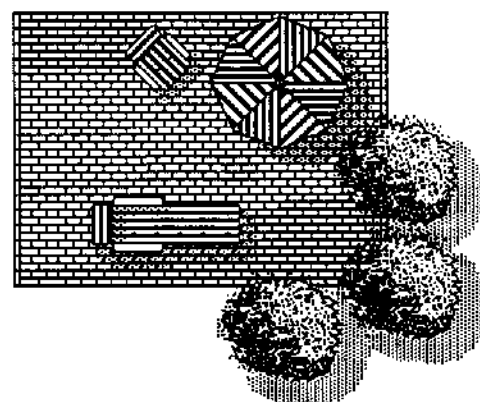
Answer for the later problem: \_\_\_\_\_

- ★★★ 3. Mrs. Buchanan's third grade class needs 150 paper napkins for a party. A small package of 50 napkins costs \$0.99. A large package of 150 napkins costs \$2.75. How much money would the class save by buying the large package of napkins?

Answer: \_\_\_\_\_

- ★★★ 4. Georgia is making a patio in the shape of a rectangle. The width of the patio is 10 feet. The perimeter is 50 feet. What is the length of the patio?

Answer: \_\_\_\_\_ feet



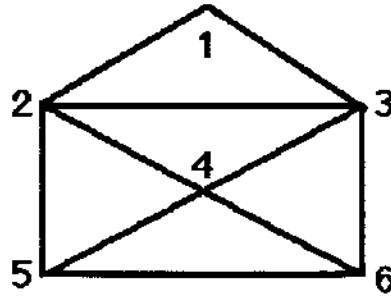
- ★ 5. At the baseball game, Brian saw a player hit a home run. About how far did the ball go? Circle the most reasonable answer.

a. 8 feet

b. 300 feet

c. 2,500 feet

- ★★★★ 6. Trace each line of this shape without lifting the pencil. You can cross a point several times, but do not retrace a whole line.

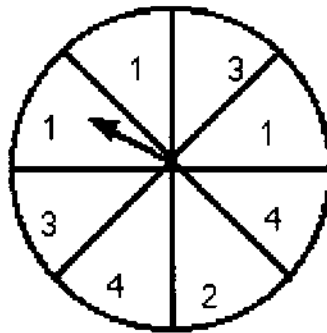


List your numbers in the order that you traced the figure: \_\_\_\_\_

- ★★ 7. Look at the spinner.

a. Which are you more likely to spin, a 2 or a 3? \_\_\_\_\_

b. Which is more likely, a 1 or a 4? \_\_\_\_\_



- ★★★ 8. On Monday 2 students went to the school store. On Tuesday, 4 students went, and on Wednesday, 8 students. If the pattern continues, how many students will go to the school store on Friday?

Answer: \_\_\_\_\_ students

# SUNSHINE MATH - 3

## Mars, III

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★ 1. Tom had 45 marbles. He gave some to Dan. He had 19 marbles left. How many marbles did he give to Dan?

Answer: \_\_\_\_\_ marbles

- ★★ 2. Ann gets up at 6:15 AM. It takes her 30 minutes to get ready for school, 10 minutes to eat breakfast, and 5 minutes to walk to the bus stop. At what time does she reach the bus stop?

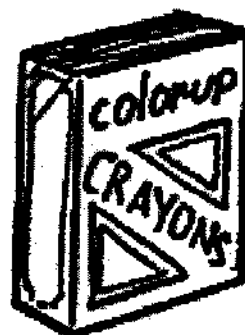


Answer: \_\_\_\_\_ AM

- ★ 3. John is emptying tennis balls into a bin for a special sale to help his father. Each can holds 3 tennis balls. How many balls will be in the bin if he empties 7 cans?

Answer: \_\_\_\_\_ balls

- ★★ 4. Drew has \$2.00 to spend. He wants to buy a box of crayons and a bottle of paste. Use the posted prices below. Does Drew have enough money?  
Answer **yes** or **no**



\$1.25



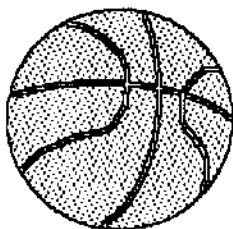
\$ 0.79

Answer: \_\_\_\_\_

- ★★ 5. David had 1 bug in his insect collection on Monday, 3 bugs on Tuesday, 6 bugs on Wednesday, and 10 bugs on Thursday. If this pattern continues, how many bugs will he have in his collection on Saturday?

Answer: \_\_\_\_\_ bugs

- ★★★★ 6. Five basketball teams are playing in a tournament. The teams will play each other only one time. How many games will be played by the end of the tournament? (Hint: Draw a picture or make a list of the teams playing.)



Answer: \_\_\_\_\_ games

- ★★★ 7. What is the least number of coins that can be used to give a customer 42¢ in change? What are the coins?

Answer: \_\_\_\_\_ coins

List the coins: \_\_\_\_\_

- ★★★ 8. Find the missing digits in the following problems. Place your answers in the boxes.

$$\begin{array}{r} \text{A} \\ 2 \square \\ + \square 6 \\ \hline 69 \end{array}$$

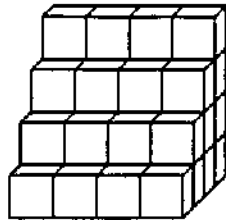
$$\begin{array}{r} \text{B} \\ 54 \\ + 2\square \\ \hline \square 1 \end{array}$$

$$\begin{array}{r} \text{C} \\ 65 \\ + \square 3 \\ \hline 13\square \end{array}$$

SUNSHINE MATH - 3  
Mars, IV

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★★ 1. How many small blocks does it take to build the set of steps below?



Answer: \_\_\_\_\_ blocks

- ★★★ 2. Write the correct number or symbol in each box.

$$1 = 9 - \square$$

$$11 = 3 \square 8$$

$$4 = 4 \square 0$$

- ★★ 3. The students in Mrs. Jower's third grade class are taking turns going to the library. Five students went to the library first. When they returned, 10 students went. The third time, 15 students went to the library. If the pattern continues, how many students will go to the library on the fifth trip?

Answer: \_\_\_\_\_ students

- ★★★ 4. Samantha earns \$2.50 each week for helping her father mow the grass. If she saves all of her money, how much will she have in 6 weeks?

Answer: \_\_\_\_\_

- ★★★ 5. I am a triangle. My *perimeter* is 96 centimeters. Two sides are 34 centimeters and 25 centimeters long. How long is my third side?

Answer: \_\_\_\_\_ cm



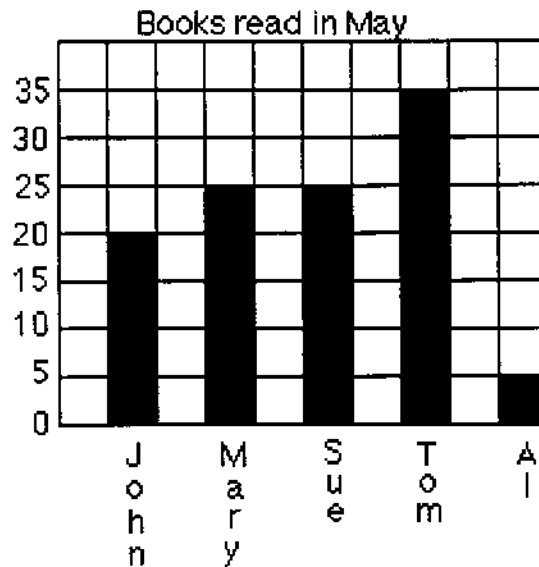
- ★★ 6. Julio's dad didn't have enough candles for his cake, so he let the dark candles stand for 2 years and the white candles for 1 year. How old was Julio?

Answer: \_\_\_\_\_ years old



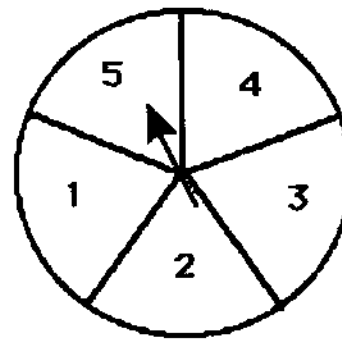
- ★★★★ 7. Look at the graph and answer the following questions:

- a. Which children read at least 20 books? Answer: \_\_\_\_\_
- b. How many more books did John read than Al? Answer: \_\_\_\_\_
- c. Who read the same number of books? Answer: \_\_\_\_\_ and \_\_\_\_\_
- d. If Al read a total of 12 books for May and June, how many books did he read in June? \_\_\_\_\_



- ★★ 8. Bill, Mark, Maria, Sue, and Julie played a game. Each boy took an *even*-numbered space on the spinner. Each girl took an *odd*-numbered space. Who was more likely to win, a girl or a boy?

Answer: \_\_\_\_\_ (boy or girl)





# SUNSHINE MATH - 3

## Mars, V

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★★ 1. Write the following in standard form without adding.

$$30 + 700 + 8 + 5,000$$

Answer: \_\_\_\_\_

- ★★ 2. There are 5 red, 3 green, and 4 blue marbles in a bag. What would be the chance of getting a red marble if the marble was pulled out of the bag without looking?

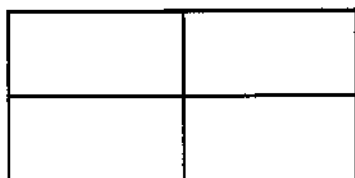


Answer: \_\_\_\_\_

- ★★★ 3. The 30 students in Mrs. Brown's third grade class are preparing for a Trivia Contest in the afternoon. Each team will have 4 members. How many teams can the students make if two classmates are absent?

Answer: \_\_\_\_\_ teams

- ★★★★ 4. Find the number of rectangles in this *visual challenge* presented by David.



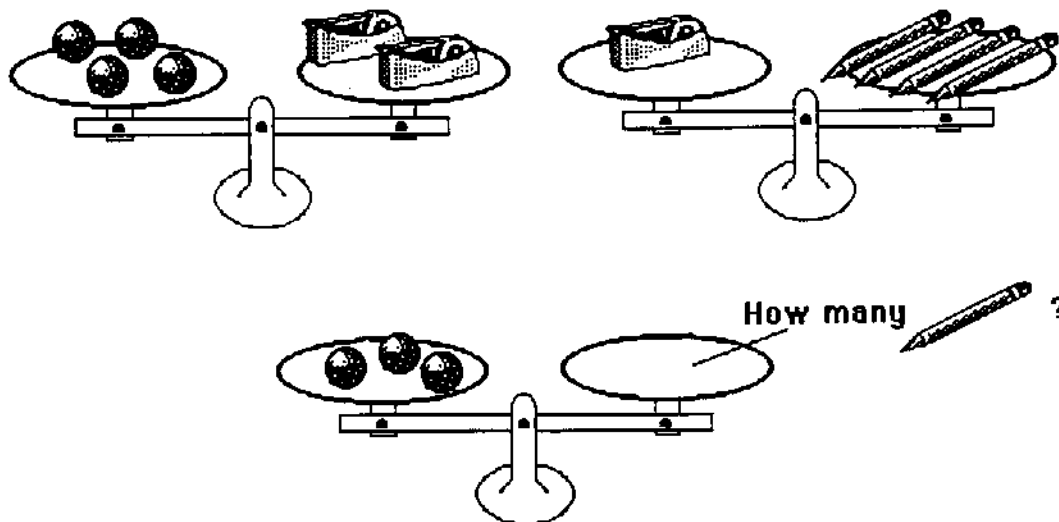
Answer: \_\_\_\_\_ rectangles

- ★★ 5. Laquinda has a number riddle for you to solve:

I am a **two-digit number less than 40**. You say me when you count by **fives**. The sum of my digits is **7**. What number am I?

Answer: \_\_\_\_\_

- ★★★★ 6. Look at the top two scales. Decide how many pencils would balance three marbles. Draw that number of pencils on the bottom scale.



- ★★★ 7. Dan went to the bookstore. He has spent \$17.00 of his \$20.00 already. He needs to buy a few disks. How many can he buy with his remaining money if each disk costs 90¢?



90 ¢ each

Answer: \_\_\_\_\_ disks

- ★★ 8. Use the line to the right as 1 unit. Measure the length and width of this paper. Measure to the nearest whole number.



Answer: \_\_\_\_\_ units long and \_\_\_\_\_ units wide

SUNSHINE MATH - 3  
Mars, VI

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★★ 1. How many 2-ounce hot dogs would make a pound?



Answer: \_\_\_\_\_ hot dogs

- ★★★ 2. Write a number sentence using all of the given numbers and symbols.

6, 9, 7, 5, 3, =, +, +, -

Answer: \_\_\_\_\_

- ★ 3. Without adding, write the following in "standard form."

$70 + 400 + 2 + 3,000 + 80,000 =$

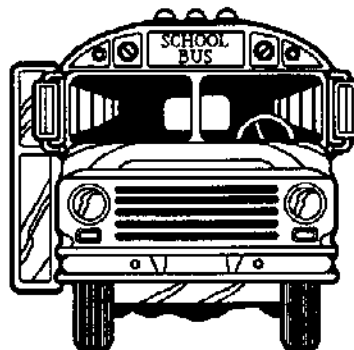
Answer: \_\_\_\_\_

- ★★ 4. The lunchroom workers are giving away free cookies today. They gave the first graders 4 cookies. They gave the second graders 8 cookies. They gave the third graders 12 cookies. They gave the fourth graders 16 cookies. If the pattern continues, how many cookies will the seventh graders receive?

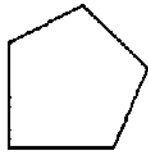
Answer: \_\_\_\_\_ cookies

- ★ 5. The students rode a school bus on their field trip. About how many students could ride in 1 bus? Circle your best estimate.

a. 400 students   b. 40 students   c. 4 students



- ★★★ 6. Alexander's back yard is in the shape of a pentagon. The perimeter is 134 meters. Four of the sides measure 20, 21, 32, and 35 meters. What is the length of the fifth side?



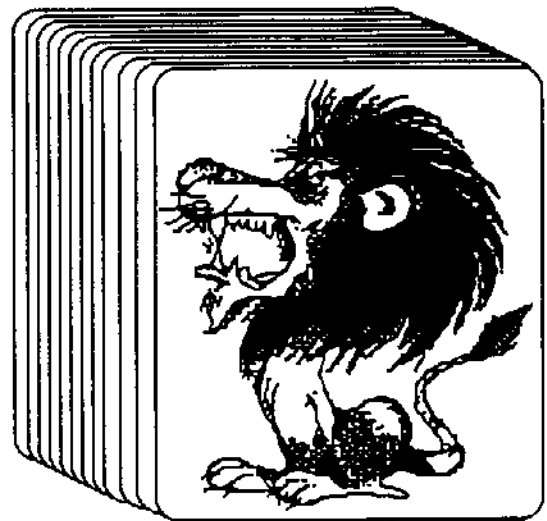
Answer: \_\_\_\_\_ meters

- ★★ 7. Draw the next figure in the pattern.



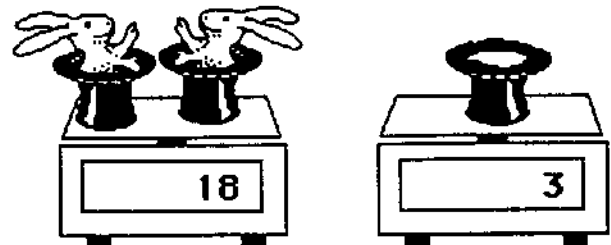
- ★ 8. Darrell has a set of animal cards in a covered box. There are 2 giraffes, 5 lions, 2 monkeys, and 4 llamas. Which is more likely that Darrell will pick out of the box without looking, a giraffe card or a llama card?

Answer: \_\_\_\_\_ card



- ★★★★ 9. A magician weighed his twin rabbits and identical hats together and got 18 pounds. He then weighed one hat and got 3 pounds. What was the weight of one rabbit?

Answer: \_\_\_\_\_ pounds



# SUNSHINE MATH - 3

## Mars, VII

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★ 1. Find the mystery number (?) using the relationships shown:

$28 : 7$

$20 : 5$

$16 : 4$

$12 : ?$

Answer: \_\_\_\_\_

- ★★ 2. John is helping his father box up used golf balls for a special sale. Each box will hold 6 golf balls. How many boxes will they need to box up 52 golf balls?

Answer: \_\_\_\_\_ boxes

- ★★★ 3. Solve the following magic squares. The sum across each row, and down each column, must be the same sum as the sum along the diagonal. (**Place the numbers in the boxes**)

	1	8
	5	3
2		

12		14
	11	
	15	10

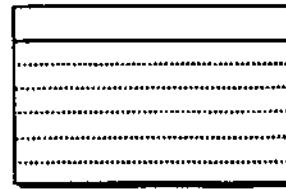
- ★★★ 4. Ricardo is 4 years older than his sister Rosa. If their ages are added together, the sum is 14. What are the ages of Ricardo and Rosa?

Answer: Ricardo is \_\_\_\_\_ years old.

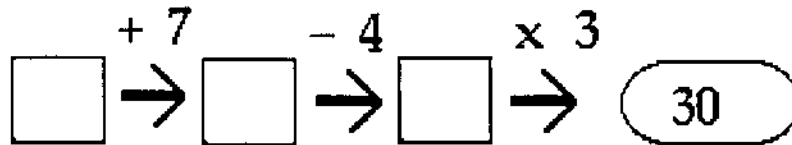
Rosa is \_\_\_\_\_ years old.

- ★★★★ 5. An index card is shown to the right. How many rectangles are formed on this card?

Answer: \_\_\_\_\_ rectangles



- ★★ 6. What is the starting number in this puzzle?



Answer: \_\_\_\_\_

- ★★ 7. How many 3-digit numbers can be made using the following digits only once in each number?

Use the digits:            2 ,    3,    4

Answer: \_\_\_\_\_ numbers can be made

- ★★★ 8. Pam is using beads to make a necklace. The bowl contains 40 yellow beads, 20 blue beads, and 40 red beads. If she uses *half* of each color that is in the bowl, how many beads of each type will she use?



Answer: She will use \_\_\_\_\_ yellow, \_\_\_\_\_ blue, and \_\_\_\_\_ red beads.

# SUNSHINE MATH - 3

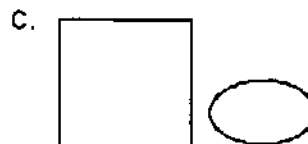
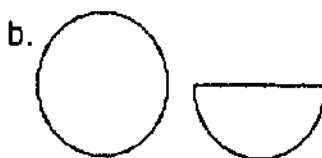
## Mars, VIII

Name: \_\_\_\_\_  
(This shows my own thinking.)



- ★★ 1. Notice how the two shapes are alike:

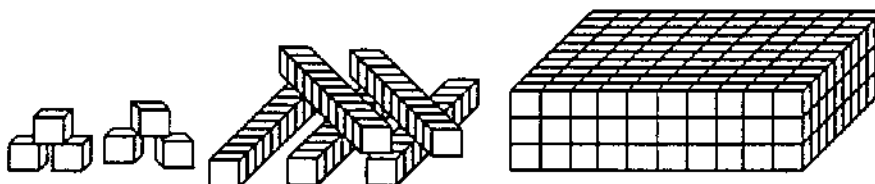
Which pair of shapes are alike in the same way? Circle your answer.



- ★ 2. Ashley has a set of color tiles in a bag. There are 2 greens, 5 reds, 2 yellows, and 4 blues. Without looking, is Ashley more likely to pick a green tile or a yellow tile?

Answer: \_\_\_\_\_

- ★★ 3. How many small cubes are there in the entire collection below?



Answer: \_\_\_\_\_ cubes

- ★★★ 4. There are 4 bookshelves in the classroom. Each bookshelf has room for 20 books. If Mrs. Hogan has 90 books, how many books will not be able to fit on the shelves?

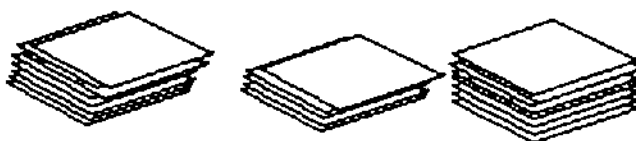


Answer: \_\_\_\_\_ books

- ★★★ 5. Three rose and two holly bushes are planted at the first stop of the nature trail. Then three rose and two holly bushes are planted at the second stop. Rose and holly bushes are planted in the same way until 20 bushes are planted. How many rose and how many holly bushes are planted?

Answer: \_\_\_\_\_ rose bushes; \_\_\_\_\_ holly bushes

- ★★★ 6. Abraham had three stacks of baseball cards. One stack had 25 cards in it, the next stack had 20 cards in it, and the third stack had 30 cards. How many cards would be in each stack if Abraham made them all the same height?



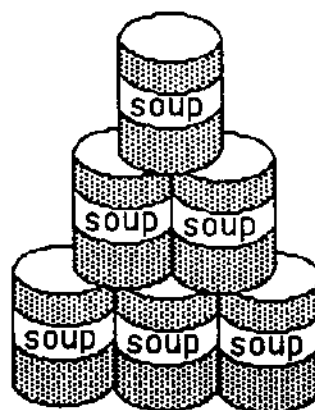
Answer: \_\_\_\_\_ cards

- ★★★ 7. Solve the magic square. The sum across each row, and down each column, must be the same as the sum along each diagonal.

5		
	6	2
3		7

- ★★★ 8. A can of soup weighs 251 grams. How many cans would weigh about 1 kilogram?

Answer: \_\_\_\_\_ cans





# SUNSHINE MATH - 3

## Mars, IX

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★★ 1. Ann is thinking of a number. She gives Tina this clue:

*If you multiply my number by 4,  
and then subtract 3,  
the answer is 17.*

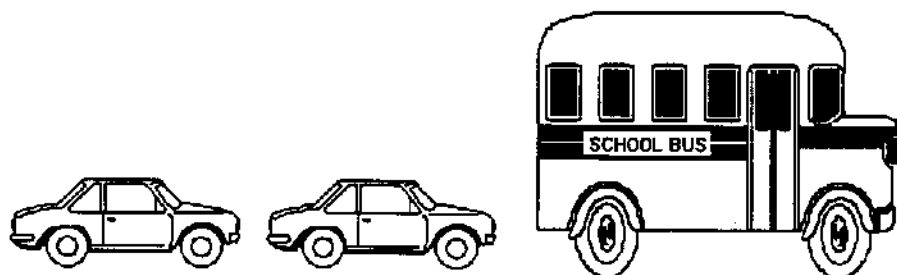
What is Ann's number ? \_\_\_\_\_

- ★★★★ 2. Use the symbols = (equal to) , < (less than) , and > (greater than) to compare the problems below. Work each side before deciding which sign to use. Put your answers in the boxes.

a. $23 + 42$	<input type="text"/>	$76 - 15$
b. $5 \times 4$	<input type="text"/>	$3 \times 6$
c. $27 - 13$	<input type="text"/>	$18 + 5$
d. $72 \div 9$	<input type="text"/>	$48 \div 6$

- ★★★ 3. Eighty-four students went on a field trip to another city. The school had one bus that held 68 students. The rest of the students had to travel by car. If 4 students could ride in each car, how many cars were needed?

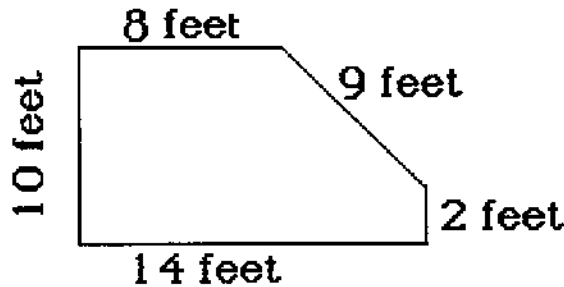
Answer: \_\_\_\_\_ cars



- ★★ 4. Gina is having a birthday party at home. Each time the doorbell rings, two of her friends arrive. If the doorbell rings 4 times, how many people are at the party?

Answer : \_\_\_\_\_ people

- ★★★ 5. Joe's grandmother is planting a vegetable garden. She needs a fence to keep animals out. She has to know the *perimeter* of her garden to buy the right amount of fencing. How much fence does she need?



Answer: \_\_\_\_\_ feet

- ★★★★ 6. Study the following puzzle. Then answer the question.

✂✂ = ☐☐☐☐
☐ = ✈✈✈

How many ✈'s is a ✂ worth?

Answer: \_\_\_\_\_ ✈'s

- ★ 7. Sergio bought a hand-held game and an adapter for \$28.00. The game cost \$19.00. What was the cost of the adapter?

Answer: \_\_\_\_\_

- ★★ 8. Tom, Bill, and Joe picked oranges from the tree in their grandfather's yard. Tom picked 12 more oranges than Joe. Joe picked 8 less oranges than Bill. Bill picked 23 oranges. How many oranges did they pick together?

Answer: \_\_\_\_\_ oranges

SUNSHINE MATH - 3  
Mars, X

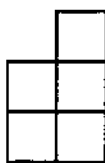
Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★★ 1. Shayna has a set of blocks in a bag. There are 2 squares, 5 circles, 2 triangles, and 4 rectangles. What fraction of the blocks are squares? Circles?

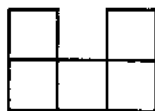
Answer: \_\_\_\_\_ of the blocks are squares

Answer: \_\_\_\_\_ of the blocks are circles

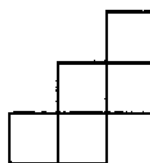
- ★★ 2. Which figure will fold into an open box? Circle it



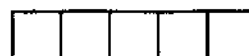
a



b



c



d

- ★ 3. Which digits below are made up of only line segments? Circle them.

**2   4   3   5   7**

- ★★ 4. Rebecca bought a pack of 12 pencils. About how much did she spend? Circle your answer.

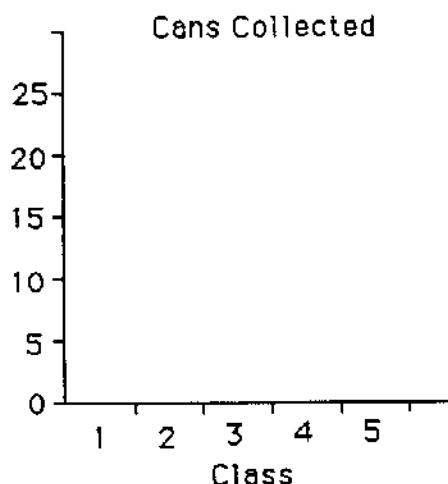
a. \$2.25      b. \$10.25      c. \$0.10

- ★★★ 5. Amanda eats supper from 6:30 to 7:00. Then she watches a half-hour television program. She takes 5 minutes to brush her teeth, 15 minutes to take a bath, and 5 minutes to dress for bed. How much time is left for Amanda to read if she goes to sleep at 8:30?

Answer: \_\_\_\_\_

- ★★ 6. Five third-grade classes collected cans. The table gives you the data. Complete the bar graph to show the data.

Class	Cans
1	15
2	25
3	25
4	20
5	20



- ★★★ 7. The classes above put all their cans together. Then they divided them equally among the five classes. How many cans did each class end up with?

Answer: \_\_\_\_\_

- ★★ 8. Watch how Marcus multiplies in his head:

*For  $2 \times 35$ , first I do  $2 \times 30 = 60$ . Then I do  $2 \times 5 = 10$ . Last, I add 10 to 60 to get 70. So  $2 \times 35 = 70$ .*



Practice doing these problems the way Marcus does, in his head. You will be given a problem to do mentally when you turn in your paper.

$3 \times 22 =$

$3 \times 24 =$

$2 \times 45 =$

Answer for the problem given later: \_\_\_\_\_

- ★★★ 9. Bart and Luwan prepared the tables for art. They put 2 pieces of poster board and 6 markers on each table. There are 24 markers on the tables. How many pieces of poster board are on the tables?

Answer: \_\_\_\_\_ pieces

# SUNSHINE MATH - 3

## Mars, XI

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★★ 1. What numbers belong in the following number sentences? Write your answer in the boxes.

$$\begin{array}{rcl} 288 & + & \boxed{\phantom{000}} = 395 \\ 579 & - & \boxed{\phantom{000}} = 395 \end{array}$$

- ★★★ 2. Mrs. Brown's third grade class planted 35 tomato seeds in their class garden. Only 4 out of every 5 seeds grew into plants. How many plants were there?

Answer: \_\_\_\_\_ plants

- ★★ 3. Tom has a stamp album. Each page has 5 rows of 6 stamps. He has stamps in 3 whole rows and one-half of the fourth row. How many *more* stamps can he put on that page?

Answer: \_\_\_\_\_ stamps

- ★★ 4. Bill needs some computer disks. At the store the plain disks are formatted for IBM. The disks with the Apple are the type he needs. Study the picture. What fraction of the disks should he buy? What fraction of the disks should he not buy?



Answer : \_\_\_\_\_ of the disks he can buy

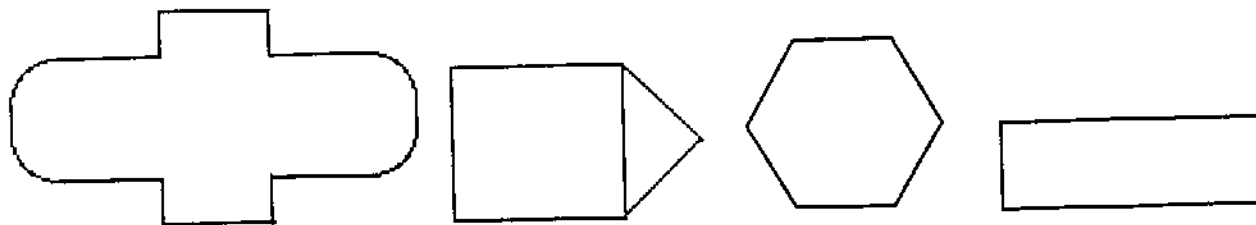
\_\_\_\_\_ of the disks he should not buy

- ★★ 5. Sally bought 4 stamps at 32 ¢ each. How much change should she receive from the dollar and a half she gave the clerk?



Answer: \_\_\_\_\_

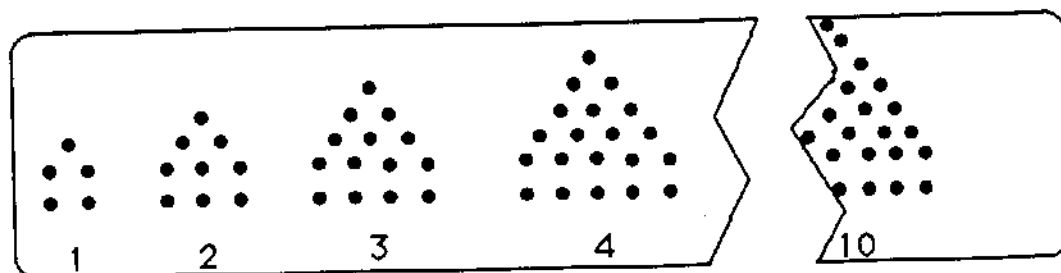
- ★★★★ 6. Symmetry means that a shape can be folded in half and both sides will match perfectly. Draw the lines of symmetry in the shapes below. Some shapes will have more than one line of symmetry.



- ★★★ 7. The library at Miller Elementary School has an odd number of tables. Some tables will seat 4 students and some tables that will seat 6 students. A total of 32 students can sit at the tables with no empty seats. What is the number of tables of each type? (Drawing a picture might help).

Answer: \_\_\_\_\_ tables of 4  
 \_\_\_\_\_ tables of 6

- ★★★ 8. Study the pattern of dots. How many dots made the 10th figure, before the paper was cut?



Answer: \_\_\_\_\_ dots

## SUNSHINE MATH-3

Mars, XII

Name: \_\_\_\_\_

(This shows my own thinking)

- ★ 1. Mrs. Boyd baked 22 rolls. She baked 12 *more* muffins than rolls. How many muffins and rolls did she bake together?

Answer: \_\_\_\_\_ muffins and rolls

- ★★★ 2. Mrs. Smith's class was observing birds in the trees. There were three mockingbirds and two cardinals in each tree. The class left after counting 35 birds. How many mockingbirds and how many cardinals did they see?

Answer: \_\_\_\_\_ mockingbirds; \_\_\_\_\_ cardinals



- ★★ 3. Practice these problems using mental math. You will be given a problem to do mentally when you turn in your paper. (Hint: think of money)

$3 \times 25 =$

$4 \times 50 =$

$2 \times 25 =$

$5 \times 25 =$

Answer for the problem given later: \_\_\_\_\_

- ★★ 4. At the school store, paper costs 35¢; a pencil costs 25¢; and an eraser costs 5¢. Jamie has 50¢. Does Jamie have enough money for paper and a pencil? Katie has 75¢. Can she buy one of each item?

Answer for Jamie: \_\_\_\_\_ Answer for Katie: \_\_\_\_\_

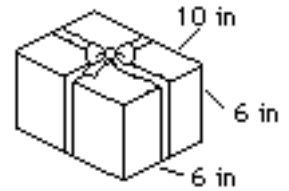
- ★★★★ 5. Mazie counted her dimes. When she put them in groups of 4, she had two dimes left over. When she put them in groups of 5, she had one left over. What is the smallest number of dimes she could have, if she has more than 10?

Answer: \_\_\_\_\_



★★★★

6. Joshua gave Warren a birthday present. How much ribbon did he need to go around the present and make the bow? The bow took 12 inches by itself.



Answer: \_\_\_\_\_ inches

★★

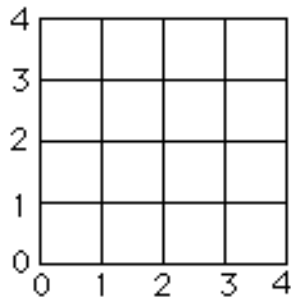
7. I am a 3-digit number less than 300. My tens digit is less than my ones digit and my ones digit is less than my hundreds digit? Who am I?

Answer: \_\_\_\_\_

★★★

8. On the grid below, find the point for each number pair. Connect the points in order. Name the figure. (Hint: the first number of each pair says how far *out*; the second how far *up*.)

Here are the number pairs: (1,2) (2,3) (4,3) (4,1) (2,1) (1,2)



Answer: The figure is a \_\_\_\_\_.

★★★

9. Dogs, cats, and donkeys had a tug-of-war. Four cats tied with three dogs. Two donkeys tied with six dogs. Which side won when one donkey tugged with five cats?



Answer: \_\_\_\_\_



# SUNSHINE MATH - 3

## Mars, XIII

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★ 1. Sue asked her friend to find the next 3 numbers in the sequence below. Write them on the blanks.

4, 9, 7, 12, 10, 15, 13, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

- ★★★ 2. Crystal has exactly \$2.40 in quarters, dimes, and nickels. She has the same number of each type of coin. What is that number?

Answer: \_\_\_\_\_ quarters, dimes, and nickels

- ★★★ 3. Tom, Alan, Bill, and Joe enjoy collecting insects. They made a graph to compare their collections. Study their pictograph and answer the following questions:

- a. Who has the largest insect collection? \_\_\_\_\_  
b. How many more insects does Alan have than Tom? \_\_\_\_\_  
c. Who has exactly half the insects that Bill has? \_\_\_\_\_

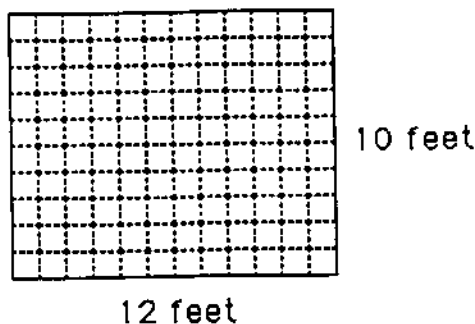
INSECT COLLECTIONS						
Tom:	✱	✱	✱			
Bill:	✱	✱	✱	✱	✱	✱
Alan:	✱	✱	✱	✱	✱	
John:	✱	✱	✱	✱		

KEY: ✱ = 5 insects

- ★★ 4. Ted started his homework when he got home from school. He worked 45 minutes on his homework. He then walked the dog for 30 minutes. It was 5:00 when he finished walking the dog. At what time did he get home and start his homework?

Answer: \_\_\_\_\_

- ★★★ 5. Brenda wants new carpet in her room. Her father told her to find the area of the room so they would know how much carpet to buy. Look at the drawing of her room and find the amount of carpet she needs. (*Area* is number of square feet in her room.)

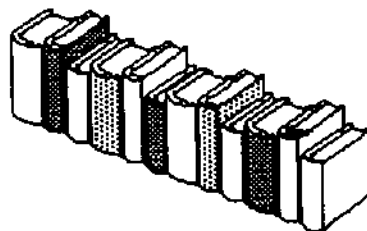


Answer: \_\_\_\_\_ square feet.

- ★★ 6. Quentin has a bag of numbered blocks. Each of the blocks has a 2, 3, 4, 5, or 6 on it. He pulled 4 different blocks from the bag. The total of the numbers on the 4 blocks was 18. What blocks did he pull out?

Answer: \_\_\_\_\_

- ★★★ 7. Ellen was dusting her bookcase. The top shelf has 16 books. The second shelf has 23 books. The third shelf has 21 books. The bottom shelf has 28 books. She rearranged the books and put the same number on each shelf. How many books were on each shelf then?



Answer: \_\_\_\_\_ books

- ★★★★ 8. Pam gave her friend Tammy the number riddle below. Solve it.

*I am a 2-digit number less than 84. The sum of my digits is 9. The ones digit is twice the tens digit. What number am I?*

Answer: \_\_\_\_\_

- ★★★ 9. There were 3 cookies on a plate. Henry ate  $\frac{1}{3}$  of the cookies on the plate. Marsha ate  $\frac{1}{2}$  of what was left. How many cookies were left for Art to eat?



Answer: \_\_\_\_\_ cookies

# SUNSHINE MATH - 3

## Mars, XIV

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★ 1. Stephanie had 35 crayons. She gave 12 crayons to Brian. How many crayons did Stephanie have left? Circle the number sentence that correctly answers the problem.

a.  $35 + 12 = 47$       b.  $35 - 12 = 23$       c.  $35 - 23 = 12$

- ★★★★ 2. Two dogs together weigh 36 pounds. Fido weighs twice as much as Rex. How much does each dog weigh?

Answer: Fido: \_\_\_\_\_ pounds

Rex: \_\_\_\_\_ pounds

- ★★ 3. I am a number between 500 and 600. My ones digit is 5. My tens digit is the difference between my ones and hundreds digits. Who am I?

Answer: \_\_\_\_\_

- ★★★ 4. Georgia and Samantha baked a cake. They wanted to divide it into two equal parts to take home and share with their families. Which of these ways below show the top of a cake pan divided into equal parts? Circle all the correct ways.



a



b



c



d

- ★★★★ 5. Should the object be measured in grams or in kilograms?

a. a feather: \_\_\_\_\_

b. bulldog: \_\_\_\_\_

c. television set: \_\_\_\_\_

d. a penny: \_\_\_\_\_



- ★★★★ 6. There are 4 more oranges than apples in the fruit bowl. There are 5 more apples than bananas. There are 2 bananas. How many of each type of fruit is in the bowl? How many pieces of fruit in all?

\_\_\_\_\_ bananas                      \_\_\_\_\_ oranges  
 \_\_\_\_\_ apples                      \_\_\_\_\_ fruit

- ★★ 7. Use mental math. Circle the correct amount of change:

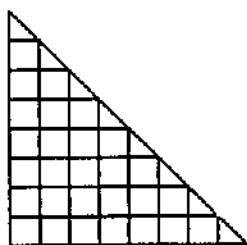
Richard gave the cashier \$5.00 for a game that costs \$3.50.

a. \$1.00                      b. \$1.25                      c. \$1.50

Cameron gave the cashier \$3.00 for marbles that cost \$2.25.

a. \$0.50                      b. \$0.75                      c. \$0.85

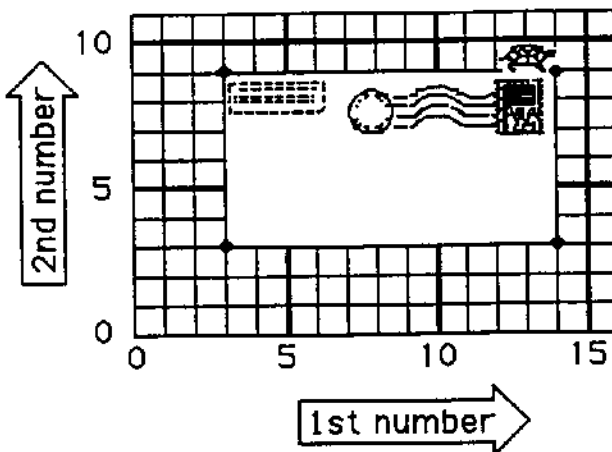
- ★★★ 8. What is the area of the triangle below?



Answer: \_\_\_\_\_ square units

- ★★★★ 9. Tell the turtle how to go *clockwise* around postcard. Fill in the blanks with ordered pairs of numbers from the grid.

Start at (14, 9). Turn right  $90^\circ$ .  
 Go to (\_\_\_\_, \_\_\_\_). Turn right  $90^\circ$ .  
 Go to (\_\_\_\_, \_\_\_\_). Turn right  $90^\circ$ .  
 Go to (\_\_\_\_, \_\_\_\_). Turn right  $90^\circ$ .  
 Go to (\_\_\_\_, \_\_\_\_).



# SUNSHINE MATH - 3

## Mars, XV

Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★ 1. Place the correct sign ( =, <, or > ) in the box.

$$81 \div 9 \quad \square \quad 5 \times 3$$

- ★★ 2. Ben has 5 marbles. Kate has 7 more marbles than Ben. Tina has 9 more marbles than Kate. Who has the greatest number of marbles? How many marbles do they have in all?

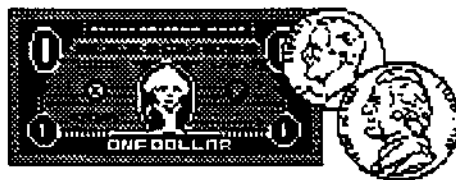
Answer: \_\_\_\_\_ has the greatest number; there are \_\_\_\_\_ marbles in all

- ★★★ 3. Ken is buying a bicycle with money he got for Christmas. The bicycle cost \$87.95. Which of the following is his change from the \$90.00 he gave the clerk? Circle the correct change.

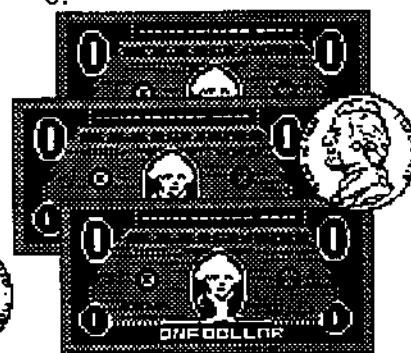
a.



b.



c.



- ★★★ 4. Find the value of each item used in the following sentences.

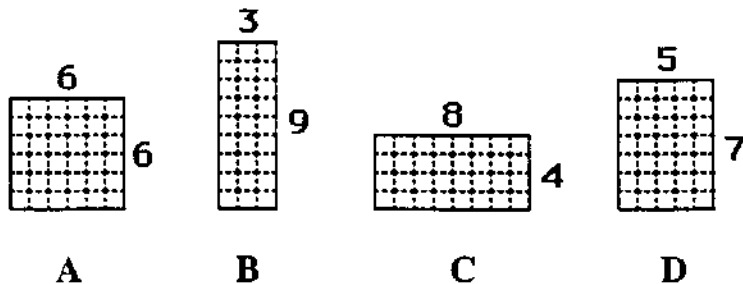
$$\text{Palm Tree} + \text{Grape} = \$9$$

$$\text{Grape} + \text{Monkey} = \$13$$

$$\text{Monkey} + \text{Monkey} = \$18$$

Answer:  $\text{Palm Tree} = \underline{\hspace{2cm}}$   $\text{Grape} = \underline{\hspace{2cm}}$   $\text{Monkey} = \underline{\hspace{2cm}}$

- ★★★ 5. Mr. Smith is planning to fence his new garden. He has 24 feet of fencing to use around the perimeter of his garden. He wants the greatest *area* for his garden. Which of the following gardens will give him the greatest area? Circle your choice.



- ★★★ 6. Some nonsense names are given to a group of numbers that are alike in some way. This is an example:

These numbers are *kewees*: 54, 78, 112, 246, 480, 574, 942

These numbers are *not* kewees: 33, 67, 147, 259, 421, 505, 863

Which of these are *kewees*? 43, 58, 166, 369, 620, 891

Answer : \_\_\_\_\_

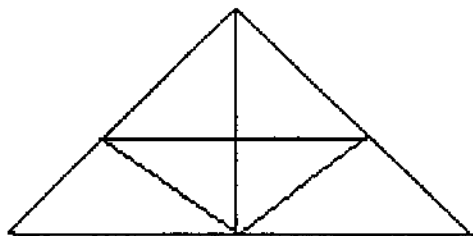
- ★★ 7. Sam asked Tim to find 3 consecutive even numbers whose sum is 48. The following are examples of consecutive even numbers that do *not* sum to 48:

$$2 + 4 + 6 = 12; \quad 4 + 6 + 8 = 18; \quad 6 + 8 + 10 = 24.$$

Help Tim by finding 3 consecutive even numbers whose sum is 48.

Answer: \_\_\_\_\_

- ★★★★ 8. Look carefully at the triangle puzzle that Paul drew. How many triangles are there?



Answer: \_\_\_\_\_ triangles

# SUNSHINE MATH-3

Mars, XVI

Name: \_\_\_\_\_

(This shows my own thinking)

- ★ 1. How many more people like blue than red?

Favorite Colors	
Blue	●●●●●●●●●●●●●●
Green	●●●●●●●●
Red	●●●●●●●●●●
Yellow	●●●●

● = 2

Answer: \_\_\_\_\_ people

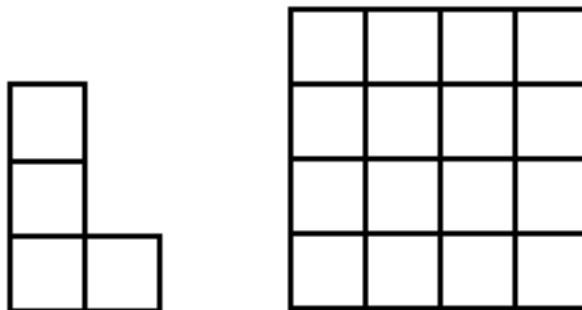
- ★★ 2. Patrick wants to make 6 bows for his Christmas presents. It takes 14 inches of ribbon to make each bow. The ribbon comes in spools of either 70 inches or 125 inches. Which size spool does Patrick need to buy?

Answer: \_\_\_\_\_

- ★★★ 3. There are four fewer pink crayons than blue crayons in the tub. There are five more blue crayons than brown crayons. There is one less brown crayon than red crayon. There are six red crayons. How many crayons in all are in the tub?

Answer: There are \_\_\_\_\_ crayons in the tub.

- ★★★ 4. Show how to use four of the “L-shapes” to the left below, to cover the square to the right. Color each “L-shape” a different color, inside the square.



- ★ 5. Practice doing these problems mentally. When you turn in your paper, you will have a problem like these to do in your head.

a.  $4 \times 100 =$  \_\_\_\_\_

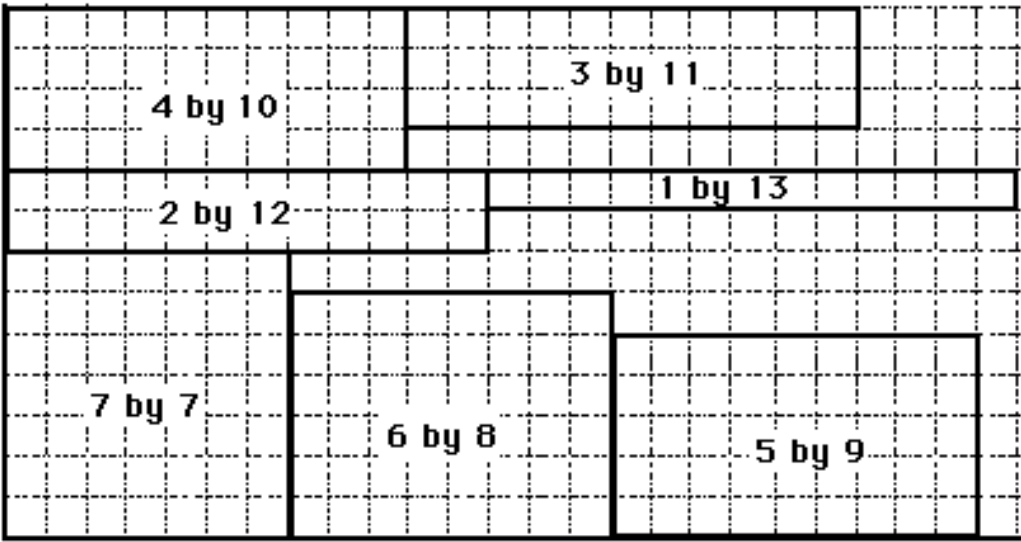
b.  $15 \times 10 =$  \_\_\_\_\_

c.  $24 \times 10 =$  \_\_\_\_\_

Answer for the problem given later: \_\_\_\_\_

★★★★

6. Find the *perimeter* and *area* of each rectangle. Then answer the questions below the grid.

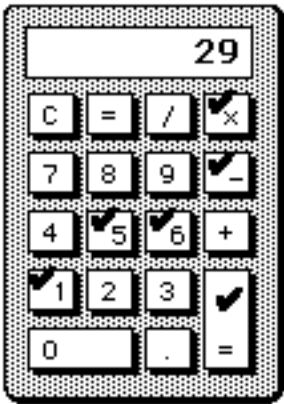
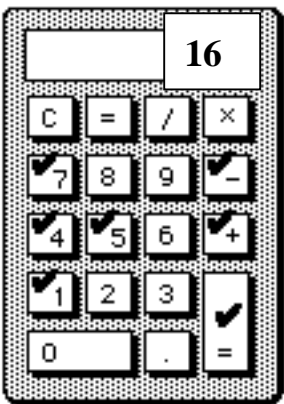
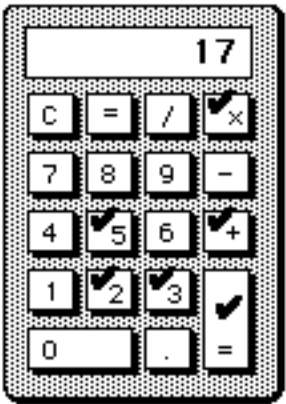


(a) Do all of the rectangles have the same *perimeter*? \_\_\_\_ If so, what is the perimeter?  
\_\_\_\_

(b) Do all of the rectangles have the same *area*? \_\_\_\_ If so, what is the area? \_\_\_\_

★★★

7. Below each calculator, write a number sentence to give the answer shown. The symbols and digits to use are checked on each calculator.



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# SUNSHINE MATH-3

Mars, XVII

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★ 1. It takes 4 push-pins to hang 3 pictures if the pictures overlap. Ann is hanging up 8 pictures on the wall for her teacher. How many push-pins will Ann need if she overlaps the corners?



Answer: \_\_\_\_\_ push-pins

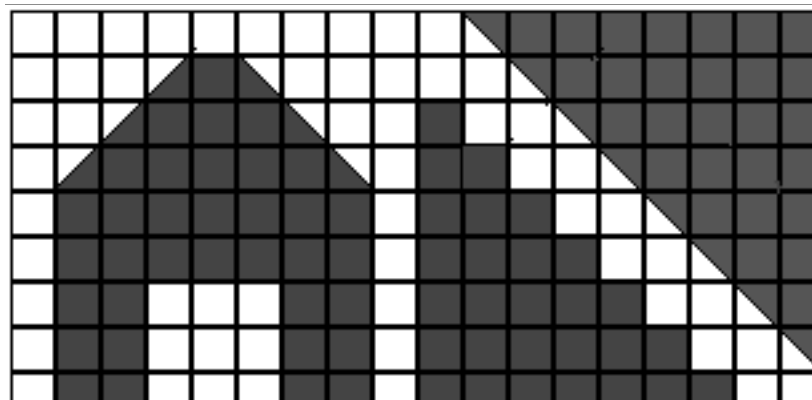
- ★★ 2. Mike has 8 more goldfish than Alan. Alan has 4 fewer goldfish than Suzie. Mike has 12 goldfish. How many goldfish do the 3 friends have in all?

Answer: \_\_\_\_\_ goldfish

- ★★★ 3. Use the digits 5, 6, 7, and 8 to create three 4- digit numbers. Each digit can be used only 1 time in a number. Find the 3 highest possible numbers.

Answer: \_\_\_\_\_

- ★★★ 4. Find the area of the shaded figures below.



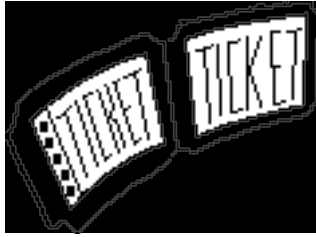
Answer: The garage has \_\_\_\_\_ ■'s.

The stairs have \_\_\_\_\_ ■'s.

The triangle has \_\_\_\_\_ ■'s.

★★★★

5. A family group of 6 went to a show. Tickets for adults are \$6. Tickets for children are \$4. The family spent \$30 for tickets. How many adult tickets and how many children tickets did they buy?



Answer: \_\_\_\_\_ adult tickets  
 \_\_\_\_\_ children tickets

★★

6. The Tigers played 20 baseball games during the summer. They won 4 more games than they lost. How many games did they win? How many games did they lose?

Answer: \_\_\_\_\_ games won  
 \_\_\_\_\_ games lost

★★

7. Use a ruler to measure the pencil below from eraser tip to point. Measure it in both centimeters and inches.



Answer : \_\_\_\_\_ centimeters  
 \_\_\_\_\_ inches

★

8. Study the number crossword. One operation sign (+, -, ×, ÷) belongs in every circle. What operation sign belongs in the circles? Write it in all the circles.

4	○	2	=	8
○	■	○	■	○
4	○	1	=	4
=	■	=	■	=
16	○	2	=	32

# SUNSHINE MATH-3

Mars, XVIII

Name: \_\_\_\_\_

(This shows my own thinking)

- ★ 1. Wednesday, Ashley practiced her gymnastic routine for 55 minutes. Thursday she practiced for 63 minutes. How much longer did she practice on Thursday than on Wednesday?

Answer: \_\_\_\_\_

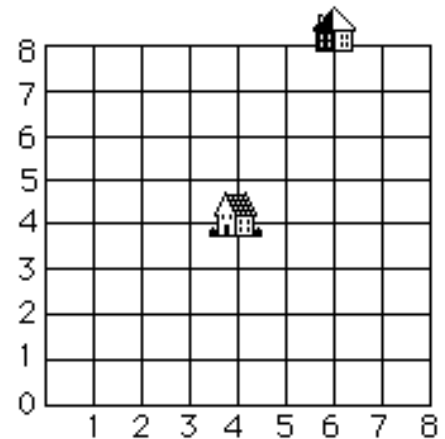
- ★ 2. What is the least three-digit number with a 3 in the tens place?

Answer: \_\_\_\_ \_

- ★★★★ 3. Below is a grid that represents Tracy's neighborhood. Each line is a street. The school is located at point (4,4) and Tracy's house is located at (6,8). Tracy walks only *down* or *to the left* when going to school.

How many different ways can Tracy to walk to school if he never goes more than 6 blocks?

Answer: \_\_\_\_ ways



- ★★★ 4. Circle the measurement you would use for these items: (mL = milliliter; L = liter)

a. fish tank                      5 mL   or   15 L

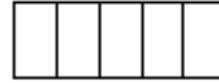
b. medicine dropper   1 mL   or   1L

c. liquid soap bottle        70 mL   or   70 L

- ★★★ 5. Darrell and Sara went to the library. On the table, there were twice as many art books as history books. There were two fewer history books than music books. There were four more music books than science books. There were four science books. How many books were on the table?

Answer: \_\_\_\_\_ books

- ★★★ 6. How many rectangles are in the figure?



Answer: \_\_\_\_\_ rectangles

- ★★ 7. A strategy to add numbers mentally is called *compensation*. You change one number to make it easy to use, then change the answer to *compensate*. This is how Abraham would add  $39 + 15$ :

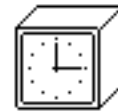
"39 is 1 less than 40.  $40 + 15 = 55$ . 1 less than 55 is 54."

Practice these problems. You will be asked to work a problem mentally when you turn in your paper.

$$49 + 18 = \quad 27 + 29 = \quad 39 + 43 = \quad 56 + 29 =$$

Answer for the problem given later: \_\_\_\_\_

- ★★★ 8. Name a time when the hands of a clock form a right angle. Name a time when they form an acute angle. Name a time when they form an obtuse angle.

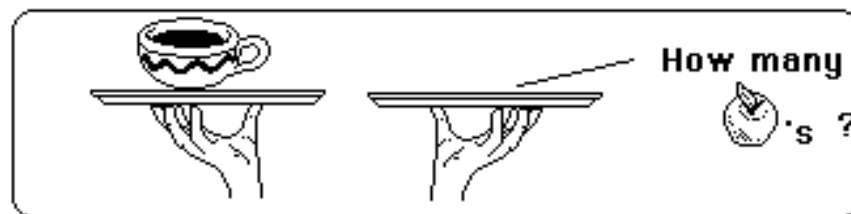
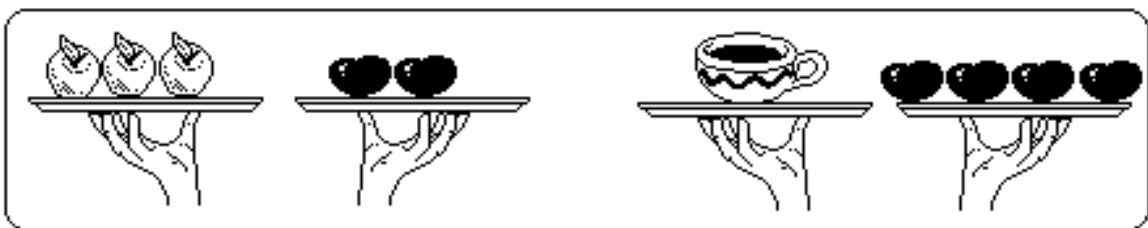


Answer: A right angle is at: \_\_\_\_\_

An acute angle is at: \_\_\_\_\_

An obtuse angle is at: \_\_\_\_\_

- ★★★ 9. For a waiter, 3 apples balance with 2 tomatoes. Also, 1 cup of soup balances 4 tomatoes. How many apples balance with 1 cup of soup? Draw them on the empty plate.



# SUNSHINE MATH-3

Mars, XIX

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★★ 1. Find the missing numbers in the number sentences below.

a.  $164 + x = 259$

b.  $357 - y = 259$

Answer: a.  $x =$  \_\_\_\_\_

b.  $y =$  \_\_\_\_\_

- ★★★ 2. Tara's age is twice Sally's age. Joan is twice Tara's age. Tara is 12 years old. How old are Sally and Joan?

Answer: \_\_\_\_\_ Sally's age

\_\_\_\_\_ Joan's age

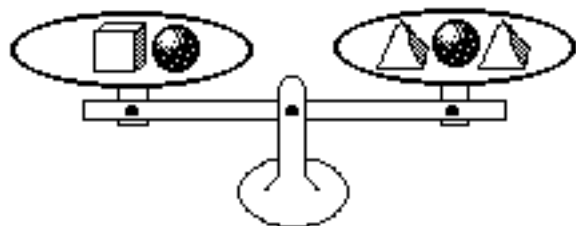
- ★★ 3. Mike is buying boxes of popcorn for himself and his friends at the movie theater. Each box of popcorn costs \$1.25 plus 7¢ tax. How much does Mike spend on 3 boxes of popcorn?

Answer: \$\_\_\_\_\_



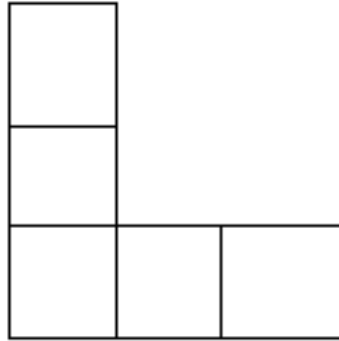
- ★★ 4. Which is heavier, a box or a pyramid?

Answer: A \_\_\_\_\_ is heavier.



★★★★

5. How many rectangles are in this figure? Lettering them and listing them will help you find all the rectangles.



Answer: \_\_\_\_ rectangles.

★★

6. Use the digits 2, 4, 6, and 8 to complete the two number sentences below. Use each number only once in each sentence. Find the number sentence with the greatest sum. Find a number sentence with the least sum. Write the numbers in the boxes.

$$\square\square + \square\square = \underline{\hspace{2cm}} \text{ (greatest)}$$

$$\square\square + \square\square = \underline{\hspace{2cm}} \text{ (least)}$$

★

7. Tamika has a secret number. If you subtract her number from 16, the answer is the same as when you subtract 4 from 12. What is Tamika's secret number?

Answer: \_\_\_\_\_

★★★★

8. Sergio played a game with bean bags on the playing mat to the right. He added the numbers from 3 throws to get his score. Each bag landed on a different number. His score was 101. On what 3 numbers did his bags land?

5	12	26
35	18	
9	40	17

Answer: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

# SUNSHINE MATH-3

Mars, XX

Name: \_\_\_\_\_

(This shows my own thinking)

- ★ 1. Shayna needs some string to tie up 7 balloons. For each balloon she needs 24 inches of string. Should Shayna buy a 150-inch roll of string or a 200-inch roll?

Answer: \_\_\_\_\_

- ★★ 2. There were seven brothers and sisters in the Smith family. Five of them went to the theater while the rest stayed home. What fraction of the brothers and sisters went to the theater? What fraction stayed home?

Answer: \_\_\_\_\_ went to the theater; \_\_\_\_\_ stayed home.

- ★★★ 3. Rebecca and her brother together ordered a burger and fries, a Jr. salad, and two Cokes. How much money did they spend?

Answer: \_\_\_\_\_

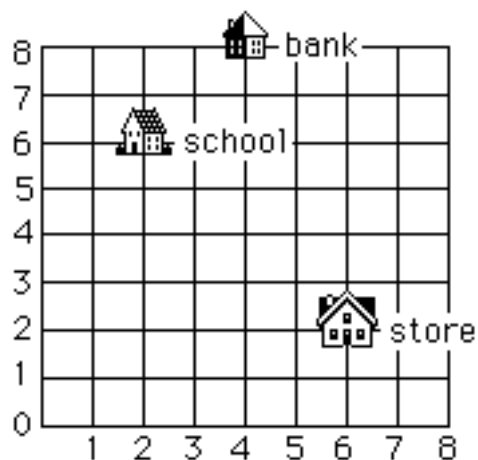
MENU		
Served with fries:		
Burger	Grilled cheese	Chicken
\$3.50	\$2.95	\$4.50
Jr. Salad		Beverages
\$2.95		\$0.75

- ★★★★ 4. Amanda bought 8 stickers for her sticker book. She bought at least one of each kind. She paid \$0.42 for the stickers. What combination of stickers could she buy?

Answer: \_\_\_\_\_ animal; \_\_\_\_\_ sports; \_\_\_\_\_ space

Stickers	
Animals	6¢
Sports	7¢
Space	4¢

- ★★★ 5. Name the building located at each numbered pair:

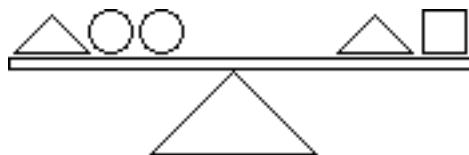


Answer: a. (2, 6) \_\_\_\_\_ b. (6, 2) \_\_\_\_\_ c. (4, 8) \_\_\_\_\_

- ★★★ 6. Circle the measurement you would choose for the following items:

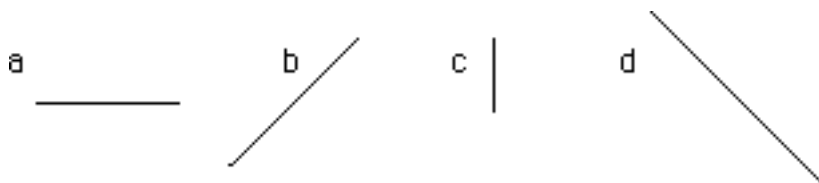
- |                      |                |
|----------------------|----------------|
| a. bag of potatoes   | 5 oz or 5 LB   |
| b. a slice of cheese | 1 oz or 10 LB  |
| c. large dog         | 70 oz or 70 LB |

- ★★★★ 7. The triangle weighs 5 ounces. The square weighs 4 ounces. How much does each circle weigh?



Answer: \_\_\_\_\_ ounces

- ★★ 8. Order the line segments from shortest to longest without measuring.



Answer: \_\_\_\_\_