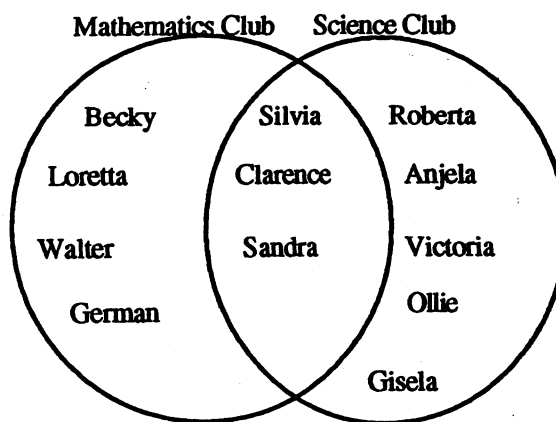# SUNSHINE MATH - 4
Jupiter, I

Name: _____

(This shows my own thinking.)

★★★★ 1. The students in Mr. Renick's 4th grade class started a mathematics club and a science club. They drew a Venn diagram to show which students were in each club. Use the Venn diagram below to answer the questions about the clubs.

Mathematics Club   Science Club

Becky   Silvia   Roberta

Loretta   Clarence   Anjela

Walter   Sandra   Victoria

German   Ollie

                               Gisela

(a) How many students were in the mathematics club? _____

(b) How many students were in the science club? _____

(c) How many students were in both clubs? _____

(d) If one-half of Mr. Renick's class is in either the math club or the science club or both clubs, what is the total number of students in Mr. Renick's class? _____

★★ 2. How many right angles are in this picture of intersecting square frames, including the background?

Answer:_____ right angles

★ 3. If the 7th day of a month is on Friday, on what day is the 24th day of the same month?

Answer: _____

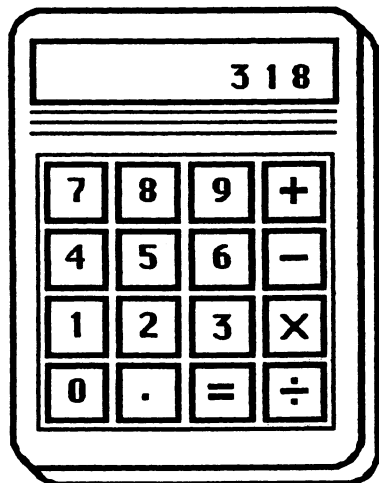★★★★ 4. Think about the following list of number pairs. Three is the first number of a pair, and 8 is the second.

3 → 8
4 → 11
5 → 14
6 → 17
. .
. .
10 → 29
. .
. .
. .

a. If 50 is the first number, what is the second number? _____

b. If 200 is the first number, what is the second number? _____

c. If 89 is the second number, what is the first number? _____

d. If a number n is the first number, what is the second number? _____

★★ 5. The sum of two whole numbers is 72. Their difference is 48. What are the two numbers?

Answer: _____ and _____

★ 6. Henry was at the store, and used his calculator to add up the price for 2 loaves of bread. He got the number shown in the display, but didn't know exactly how much money that was. How much money would those two loaves cost? Circle the correct answer below.

```
   3 1 8

7  8  9  +
4  5  6  −
1  2  3  ×
0  .  =  ÷
```

a. $318

b. 3.18¢

c. $318.00

d. $3.18

★★ 7. In your class, 9 students received an "excellent" on a recent project. Your teacher would like to buy pencils for those 9 students. The school store sells them for 10 cents each or 3 for 25 cents. What is the least amount of money your teacher will have to spend in order to buy one pencil for each of the 9 students?

Answer: _____ cents
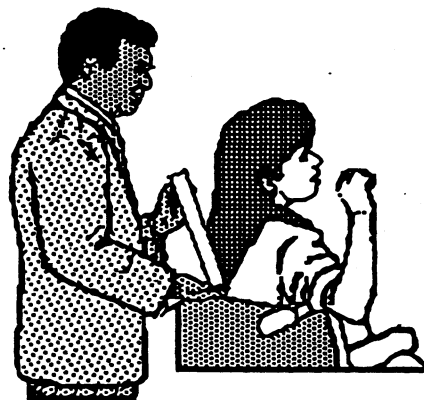
16

SUNSHINE MATH - 4
Jupiter, II

Name: _____

(This shows my own thinking.)

★★ 1. Hair grows about $\frac{1}{2}$ inch each month. After you shave your head, how many years will it be until your hair is 1 foot in length?

Answer: _____ years

★★ 2. Robert received a weekly allowance of $6 on Monday. He put 50% of his money in his empty piggy back, but then took out 50% of that money to go to a movie. How much money was left in the piggy bank?
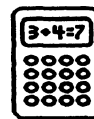
Answer: $_____

★ 3. An arcade video game had a code built in. In order to play the game Tamika had to find the missing numbers. Help her by filling in the pattern below.

113, ____, 95, 86, 77, ____, 59, ____, 41, 32, 23, 14, 5.

★★★ 4. Sabrina used a calculator and started adding the whole numbers in order:

$1 + 2 + 3 + 4 + 5 + ...$

What is the last number she would add that would get the sum on her calculator over 1,000?

Answer:_____

★★ 5. Marcus, Aaron, and Jason went to a double feature movie. The show began at 1:45 pm and lasted for 4 hours and 27 minutes. At what time did the show end?

Answer:_____

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★ 6. Maria, Colleen, Patsy, and Kenyada are 8, 9, 10, and 11 years old.

Maria is older than Patsy and younger than Kenyada.

Colleen is younger than Marie and older than Patsy.

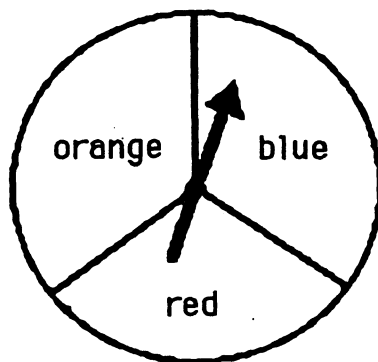What is each girl's age?

Answers: Maria: _____ years old.   Patsy: _____ years old

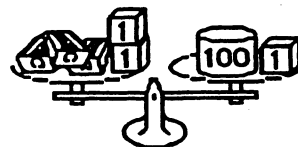   Colleen: _____ years old   Kenyada: _____ years old

★★★★ 7. On a game board, landing on blue means to move ahead 1 space, landing on red means to move ahead 2 spaces, and landing on orange means to move back 1 space. If you took 30 spins, about where would you expect to be on the game board, relative to where you started?

Answer: I would be about _____ spaces _____ .
                                              (ahead or behind)

★★★ 8. Margarit liked to balance things. She balanced 3 pencil sharpeners and 2 one-gram blocks with a 100-gram weight and another one-gram block. She let x stand for the weight of one pencil sharpener, and she claimed that $x = 30$ grams. Was she correct? If not, how much did each pencil sharpener weigh?

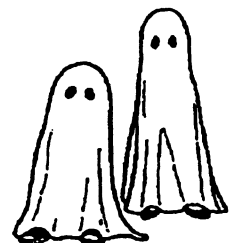Answer: _____

Name: _____

(This shows my own thinking.)

★★ 1. After filling in the multiplication table below, Parker noticed some number patterns. Fill in the chart and follow the directions beneath it.

X	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Draw a circle around the line of numbers that has only *square numbers* in it.

★★★ 2. Mr. Jackson is preparing bags of treats to give trick or treaters on Halloween. He has 48 pieces of candy and 60 pieces of gum. He uses all the candy and gum, and he puts the same ratio of candy to gum in each bag. What is the largest number of bags he could have made?
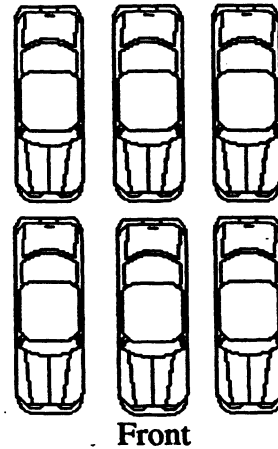
Answer: _____

★ 3. It is now 10:45. What time will it be in 2 hours and 15 minutes?

Answer: _____

★★ 4. Six cars are parked in front of a local car dealers lot.
You are looking at the cars from the front.

   •*The red car is parked in front of the green car.*
   •*The black car is between the green car and yellow car.*
   •*The blue car is parked on the right side of the red car.*
   •*The orange car is parked in front of the yellow car.*

   Color the cars to show how they are parked, or write the
   name of the color on each car.
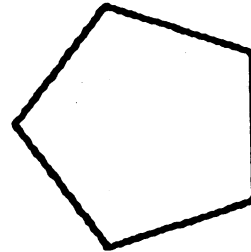
   . Front

★ 5. Susan made $15.00 baby-sitting. She spent $11.15 on a birthday present, including tax.
   To the nearest dollar, how much does she have left ?

                              Answer: _____

★★★★ 6. The Disney Golf Classic starts with 64 golfers. The golfers form pairs and each pair plays
   a match. The losers drop out and the winners of each pair then form new pairs and play
   again. Then those winners form pairs and play. This continues until there is one winner.

   a. In how many matches must the winner play? _____

   b. How many matches are played by all the golfers, to determine the winner? _____

★★★ 7. Draw all the lines of symmetry for this polygon.

★★★ 8. A number has 4 digits.
   No digits in the number are repeated.
   The digit in the tens place is three times the digit in the thousands place.
   The number is odd.
   The sum of the digits in the number is 27.

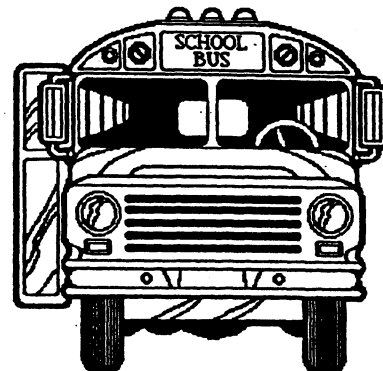   What is the number?   Answer: _____

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SUNSHINE MATH - 4
Jupiter, IV

Name: _____

(This shows my own thinking.)

★★ 1. A school bus makes 7 stops on its trip to school and 7 stops on the trip home.

    a. How many stops will the bus make in one full week of school? _____

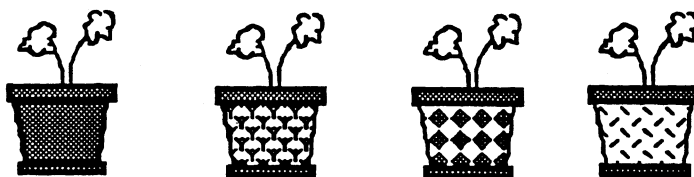   b. How many stops will the bus make in the 180-day school year? _____

★ 2. When Michelle woke up yesterday, the temperature was 72° F. By lunch time, the temperature had risen 15° F. By dinner time, it had fallen 22° F. What was the temperature at dinner time?

        Answer: _____ ° F

★★★ 3. Teresa has 4 flower pots in 4 different designs. She likes to display her flower pots in different positions on her window sill. How many different ways can she place her flower pots?

    Answer: _____ ways

★★ 4. What is the mystery number x?
- x has 3 digits.
- The tens digit is half the hundreds digits.
- The number is odd.
- The sum of the digits is 9.

        Answer: $x =$ _____

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★ 5. If the 7th day of the month is on a Tuesday, on what day is the 25th?

Answer:_____

★★★ 6. On the average your heart beats about 72 times per minute. At this rate, about how many times will it beat:
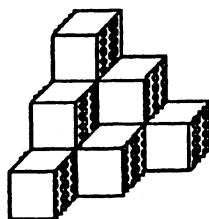
   a. in a 30-day month? _____
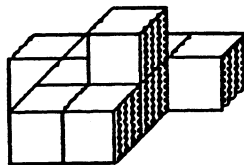
   b. in a year? _____

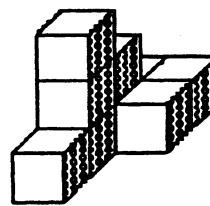   c. in your lifetime, if you live to 72 years of age? _____ .

★★★ 7. The volume of a shape is the number of cubes it will take, all the same size, to make the figure. Each figure is made of stacks of cubes that are 1 centimeter on each side. Find the volume of the figures below.

a.   b.   c.

Answer: a._____ cm^3 Answer: b_____ cm^3 Answer: c_____ cm^3

★★★ 8. In a tug of war, 5 donkeys are exactly equal to 2 elephants. In another tug of war, 3 elephants are equal to 1 car. Which team should win if a car and 3 donkeys are matched against 4 elephants?

Answer: _____