SUNSHINE MATH - 4
Jupiter, XIII

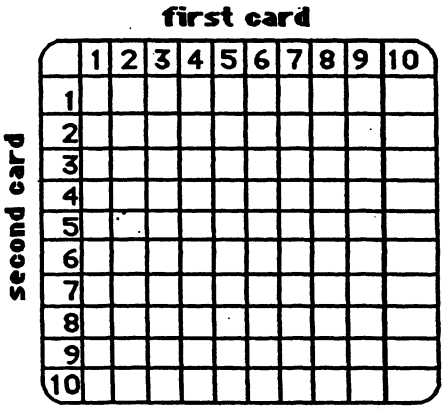
Name: _____

(This shows my own thinking.)

★★★★ 1. To win $1 million, you must draw two cards whose sum is nine, from a stack of cards numbered 1 through 10. After the first draw, you replace the card and shuffle the stack again for the second draw. What is the chance that your two cards will have a sum of nine?

Use the chart if it helps you think about the possibilities.

Answer: _____

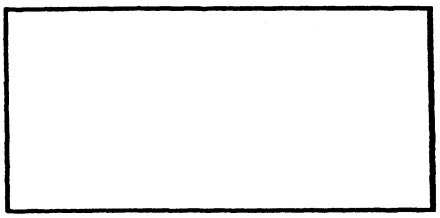


★ 2. Joey agreed to help his mom with the summer chores for $1.50 a day for 20 days. Susan agreed to water the neighbor's indoor plants and feed the cat while they were on summer vacation for $5.00 a week for 5 weeks. Who made more money over their summer vacation,

Joey or Susan?

Answer: _____

★★ 3. It's time to plant a spring vegetable garden. $\frac{1}{3}$ will be root plants, $\frac{1}{3}$ will be stalk plants, and $\frac{1}{3}$ will be vine plants. $\frac{1}{2}$ of the stalk and vine plants will be grown organically without fertilizer. What fraction of the garden will be grown organically? Fill in the rectangle to show how the garden can be set up.



Answer: ____ will be grown organically.

★ 4. Juanita has 35 pre-addressed post cards she plans to hand out to her friends so they will write to her while she is away visiting her grandmother. She has 7 friends she'd like to give them to. Write a number sentence to show how Juanita can share her cards equally among her friends.

Answer: _____

★★ 5. Mary Jane called UPS to find a cost estimate for shipping her racing bicycle from Florida to her sister's house in Vermont.

a. The first information requested by the UPS agent was for the dimensions of the bike. Circle the most reasonable answer.

(a) 14 inches by 6 inches (b) 14 feet by 6 feet

(c) 5 feet by 4 feet (d) 5 yards by 3 yards

b. The second question the agent asked was the approximate weight of the racing bike. Circle the most reasonable answer.

(a) 300 grams (b) 15 kilograms (c) 1 metric ton (d) 225 kilograms

★★★ 6. Felicia collected data from her classmates using a tally sheet. She asked each student what types of electronic appliances they had at home. Below is the data Felicia collected and recorded on a pictograph. Answer the questions related to the graph.

(a) How many different types of appliances are listed? _____

(b) What is the total number of all electronic appliances listed? _____

(c) According to the data collected, what are the three most popular electronic appliances?

Answer: _____, _____, _____

ELECTRONIC APPLIANCES AT HOME

ITEM	NUMBER FOUND
Hairdryer	💡💡💡
Television	💡💡💡💡
Washing Machine	💡💡💡
Computer	💡
Food Processor	💡
Clock Radio	💡💡
Stereo	💡💡💡
Walkman	💡💡💡💡
Lamps	💡💡💡💡💡

💡 = 4 APPLIANCES

★★ 7. Write in the three missing numbers in the pattern.

....., _____, _____, 171, 162, 153, 144, 135, 126, _____, ...

SUNSHINE MATH - 4
Jupiter, XIV

Name: _____

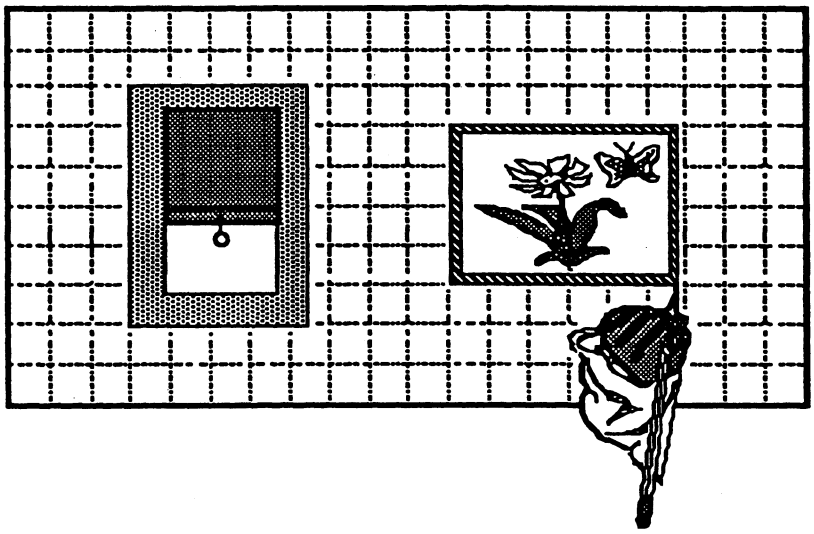
(This shows my own thinking.)

★★ 1. Charles likes to draw and thinks he will become an architect one day. He is always concerned about the size of the objects he draws. Charles said the areas of the window and picture below were about 27 square units and $23\frac{1}{5}$ square units, respectively. Was he correct? Why or why not?

Answer: _____

_____

_____



★★★ 2. Farmer Brown had some animals. One-fourth were horses, one-half were cows, and the rest were pigs. He had 8 pigs. How many animals did he have altogether?

Answer: _____

★★★ 3. To change a Fahrenheit temperature to a Celsius temperature, follow these steps:

- *Subtract 32 from the Fahrenheit temperature.*
- *Divide by 9.*
- *Multiply by 5.*

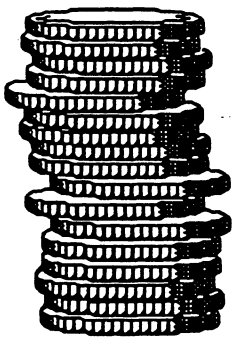
Use the steps to write the Celsius temperature for each of these Fahrenheit readings:

a. 59°F is _____ °C b. 86°F is _____ °C c. 122°F is _____ °C

★★ 4. Marilyn used the steps above, and got a Celsius temperature of 60°. What was the Fahrenheit temperature she started with? _____

★ 5. How much is this stack of quarters worth?

Answer: _____



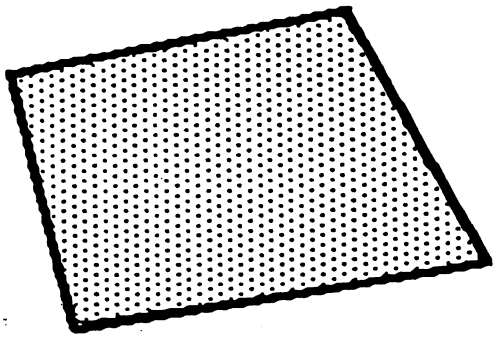
★★ 6. The Adams family wants to take a trip to Disneyworld, but can't decide what month to go. They decide to write the names of the months on 12 pieces of paper and put them in a hat. They will draw one piece of paper without looking -- that is the month they will travel.

a. What is the chance they will go during the summer months of June, July or August? _____

b. What is the chance they will go during the school year, September through May? ____

★★ 7. Shown to the right is the way 1 square inch of a newspaper would look, when enlarged so you can see the tiny dots. About how many dots are there per square inch, in a newspaper? Circle the best choice.

a. 100 b. 500 c. 1000 d. 1500



★★★★ 8. Consider each of the following. Can the equation 6 x 3 + 4 = 22 represent any of these statements? Circle "yes" or "no" beside each statement below.

yes *no* a. Six tickets at $3 each plus a $4 ticket costs $22.

yes *no* b. Six $3 lunches and a $4 tip come to $22.

yes *no* c. A bike trip of 6 miles in 3 weeks, and 4 more weeks, is 22 miles.

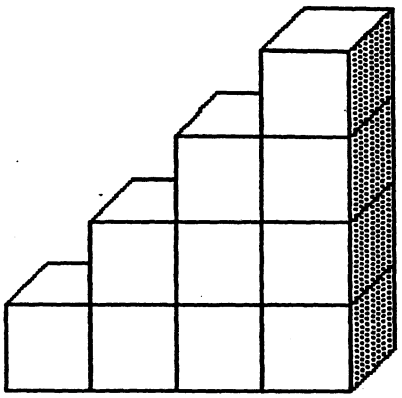
yes *no* d. Six 3-k races, plus a 4-k race, means he ran 22 kilometers that month.

SUNSHINE MATH - 4
Jupiter, XV

Name: _____

(This shows my own thinking.)

★★★★ 1. You have been asked to paint the outside surface of this figure made of cubes glued together. It will take approximately one pint of paint per square face. You do not have to paint the bottom.



a. How many pints of paint will you need?____

b. If the paint costs $4.99 per pint, estimate the cost of the paint to the nearest dollar. ____

★★ 2. In the space to the right draw a quadrilateral with only one pair of parallel sides.

The name of this quadrilateral is a: _____

★★ 3. Ricardo bought one-half dozen donuts for his family. Family members ate one-half of the donuts. How many were left for Ricardo to eat?

Answer: _____donuts

★★ 4. A commercial says "Four out of five dentists surveyed chose sugarless gum for their patients." If 1000 dentists were surveyed, how many recommended sugarless gum?

Answer: _____

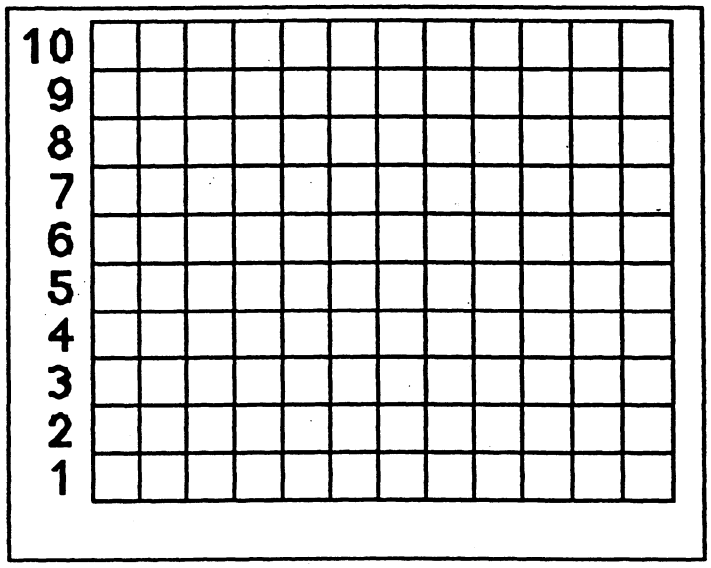
★★ 5. What number from 1 to 25 has the most factors? _____

List its factors: _____

★★ 6. Fill in the bar graph below with the data given. Write a title and label the bottom axis.

Antonio surveyed his 36 classmates to find the month of their birthdays. He tallied: 5 in January, 4 in February, 1 in March, 2 in April, 1 in May, 4 in June, 4 in July, 2 in August, 3 in September, 4 in October, 0 in November, and 6 in December.

TITLE: _____

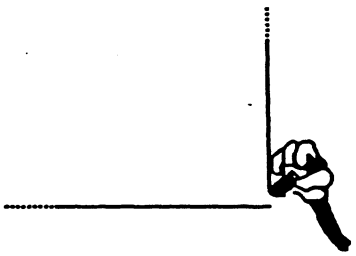


★★ 7. A skating rink plays different songs during a two-hour skating party. The songs average 3 minutes each. There is a 15-minute break, without music, when the refreshments are served. How many songs do they need to have ready?

Answer: _____ songs

★★ 8. A pencil can draw a line 36 miles long, according to research. Mickey decided to test that theory and draw his 36 miles in the shape of a square, so he would wind up back where he started. How long would each side of the square be?

Answer: _____ miles

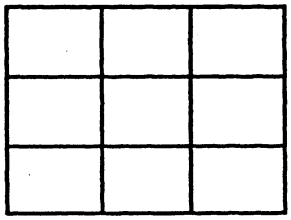


SUNSHINE MATH - 4
Jupiter, XVI

Name: _____

(This shows my own thinking.)

★★ 1. Shade part of the diagram below to show $\frac{1}{3}$ of $\frac{1}{3}$ of the whole rectangle.



★★★★ 2. The table below lists mid-season baseball won-loss records for the Central division of the National League. Answer the questions based on the information provided in the table.

CENTRAL	W	L	TOTAL GAMES
St. Louis	31	40	
Cincinnati	43	25	
Houston	38	31	
Chicago	37	33	
Pittsburgh	30	37	

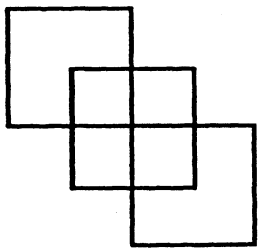
a. Fill in the total games column on the table for each team.

b. Which team has the highest winning percentage? _____

c. Which team has the lowest winning percentage? _____

d. What is the average number of games played per team? _____

★ 3. How many squares?

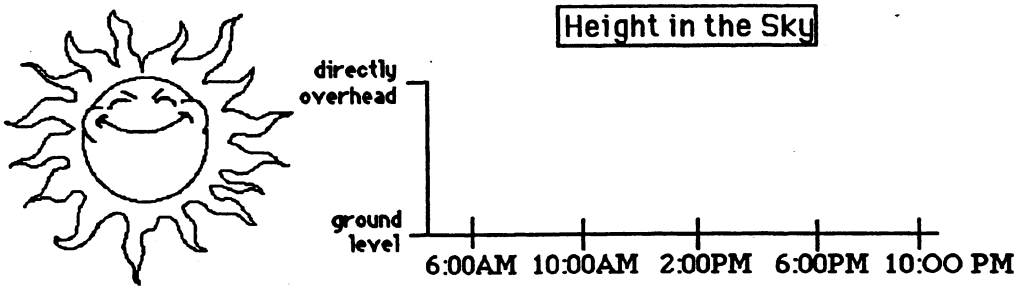


Answer: _____ squares

★★★ 4. The Fashion Store is having a Spring sale. The dresses are $\frac{1}{2}$ off and the shoes are $\frac{1}{4}$ off the regular price. Sandy buys a dress that was regularly priced at $94.50 and shoes to go with the dress that were regularly priced $29.96. What was the total amount she spent on just these two items?

Answer: _____

★★ 5. Make a line graph to show the approximate position of the sun during a sunny summer day. The sun rises at 6:00 AM and sets at 9:00 PM.



★★ 6. Ken is about to eat a bag of M&M's on the 4th of July. The number of each color M&M is listed in the table below. Answer the questions.

green	**11**
red	**8**
yellow	**13**
tan	**7**
brown	**10**
blue	**5**

a. If Ken picks the first M&M out of the bag without looking, what is the chance he will pick a brown one to match his eyes? _____

b. What is the chance his first one will match a color in the American flag? _____

★★ 7. Mike needs to buy 4 packages of pencils at 89¢ each, 2 packages of paper at $1.19 each, and an eraser package for 95¢. He has $10.00. Estimate to the nearest dollar how much money he will have left.

Answer: _____