

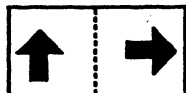
SUNSHINE MATH - 4

Jupiter, XXIII

Name: _____

(This shows my own thinking.)

- ★★ 1. The design to the right was drawn on a piece of clear plastic. The plastic was turned 180° clockwise, which is half of a complete rotation. It was then flipped over on the dotted line. Circle the picture below that shows how the design looks after these movements.



- ★ 2. If the heaviest dog in the world is 310 pounds and the next-heaviest is 14 pounds less, how much does the next-heaviest dog weigh?

Answer: _____ pounds



- ★★ 3. Sunae's group of close friends are going to fifth grade in September. All are going to Belleview Elementary and their homerooms will be rooms 12, 14, or 16. All of her friends but 4 are going to room 12, all but 4 are going to room 14, and all but 4 are going to room 16. Not counting Sunae, how many children are in her group of close friends?

Answer: _____ friends

- ★★★ 4. Sam and Suzie are twins. Sam has as many brothers as he has sisters -- Suzie has at least 1 sister, and twice as many brothers as sisters. How many kids are in the family altogether?

Answer: _____ kids

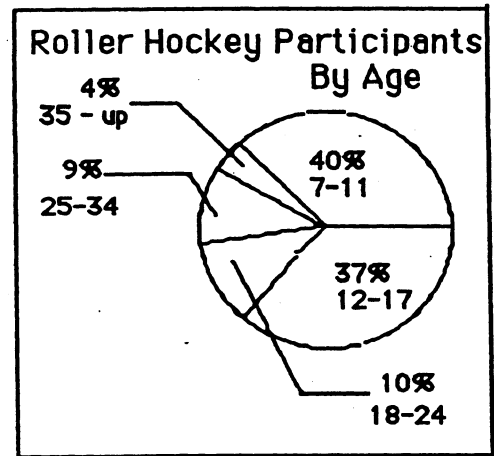
- ★★ 5. Josh bought a shirt for \$12.95, a belt for \$6.95, and a pair of jeans for \$27.97. The tax came to \$3.35. How much change did he receive if he gave the clerk 2 twenty-dollar bills and 2 ten-dollar bills?

Answer: \$ _____

- ★★★ 6. Danny's age is 13 and his favorite sport is roller hockey. Answer the questions about roller hockey participants using the circle graph below.

- a. How many ages are included in Danny's age group? _____
- b. List the age groups from greatest to least based upon their percent of participation.

Age Group	% Participation
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



- c. Use the data from part (b) to make a conclusion about participation in roller hockey as you get older:

Answer: _____

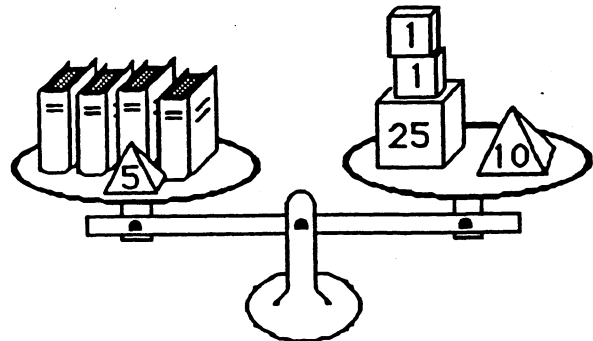
- ★★ 7. What number am I?

Answer: _____

I am even.
 I am not 7×10 or less.
 I am not a multiple of 4.
 I am not a multiple of 3.
 I am less than $10 \times 10 - 20$.

- ★★★★ 8. Four identical books and a 5-ounce weight balance 37 ounces. The equation $4x + 5 = 37$ expresses this situation, where x is the weight of 1 book. How much does 1 book weigh?

Answer: $x =$ _____ ounces



SUNSHINE MATH - 4

Jupiter, XXIV

Name: _____

(This shows my own thinking.)

- ★★★ 1. The Daily News costs \$0.35 at the news stand and is published Monday through Friday. You can also buy a four-week subscription for \$4.75. If you bought a four-week subscription, how much would you save over buying it for four weeks at the daily rate?

Answer: _____

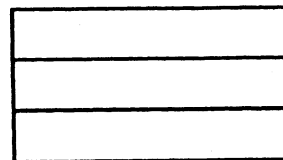
- ★★★ 2. Put > or < in the box.

$$\frac{1}{2} + \frac{3}{4} \quad \square \quad \frac{2}{3} + \frac{1}{2}$$

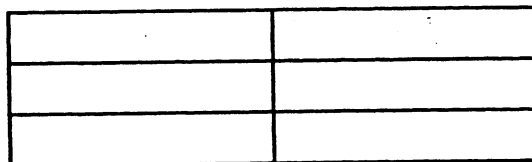
- ★★ 3. If you drink 1 can of soda each day, about how many milliliters would you drink in one year? (A can of soda is 354mL. Round your answer to the nearest ten thousand mL.)

Answer: _____ mL

- ★★★ 4. There are 6 rectangles formed by the lines in this figure:



How many rectangles are formed by the lines this figure?



Answer: _____ rectangles

- ★★ 5.
$$\begin{array}{r} 4 \text{ weeks} \quad 3 \text{ days} \quad 13 \text{ hours} \quad 21 \text{ minutes} \\ - 2 \text{ weeks} \quad 6 \text{ days} \quad 19 \text{ hours} \quad 31 \text{ minutes} \\ \hline \end{array}$$

- ★★★ 6. Which pair of numbers, whose sum is 35, have the largest product?

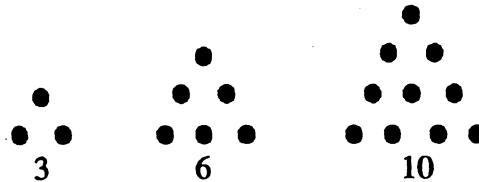
Answer: _____

- ★★ 7. Fill in the missing letter of the alphabet in this pattern:



M V E M J S U N _____

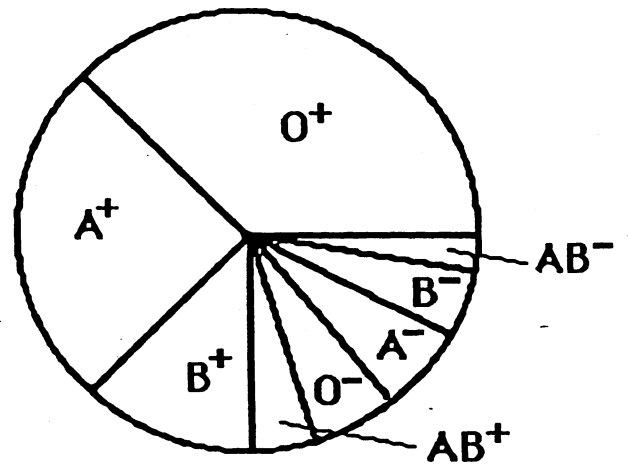
- ★★★★ 8. Here are the first three triangle numbers: 3, 6, and 10.



What are the next four triangle numbers?

Answers: _____, _____, _____, _____

- ★★★ 9. Everybody in the world has one of the eight blood types shown in the circle graph. The size of the region gives you an idea of the percent of people in the world with that type of blood. O^+ (read "oh positive") occurs more often than any other blood type -- 36% of the people in the world have O^+ blood. Answer the questions below.



- About what percent have A^+ blood? _____
- What is the most rare blood type? _____
- If a person in your school were picked at random, would they be more likely to have AB^+ or O^- blood? _____

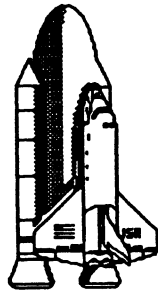
SUNSHINE MATH - 4

Jupiter, XXV

Name: _____

(This shows my own thinking.)

- ★★ 1. When the Space Shuttle lifts off, it has moved 3 km by the time you clap your hands once. By the time you clap twice, the Shuttle has moved 9 km. By the 3rd clap, it has moved 27 km, and by 4 claps and it has moved 81 km. If this pattern continues, how many km has it moved by the time you have clapped 10 times?

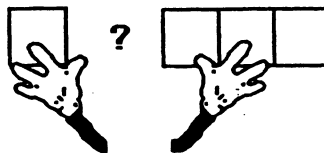


Answer: _____ km

- ★ 2. Maria needed some magazine pictures for a social studies project. She cut out pages 20, 21, 47, 48, and 104. How many sheets of paper did she remove from the magazine?

Answer: _____

- ★★★ 3. Draw three different ways to put four square tiles together. Each tile must be connected to at least one other tile along an entire side. What is the perimeter of each arrangement? What is the area of each arrangement?



↑
Drawing 1

perimeter: _____

area: _____ sq units

↑
Drawing 2

perimeter: _____

area: _____ sq units

↑
Drawing 3

perimeter: _____

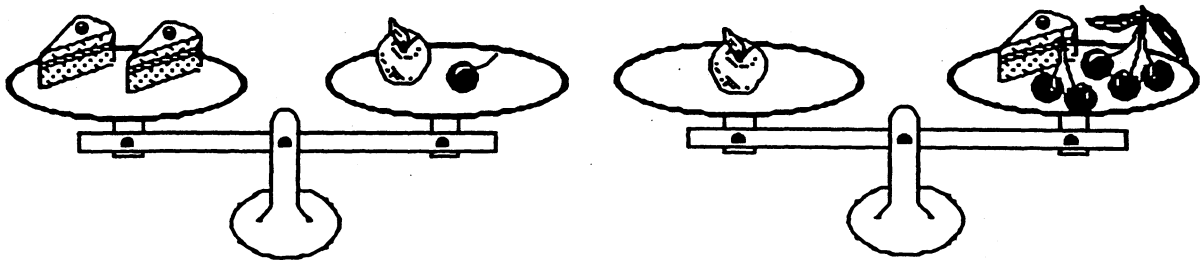
area: _____ sq units

- ★★ 4. Ms. Croskey just put her students in groups of three. Tia, Jonathon, and Courtney are in a group together and are arguing over who is going to sit by whom. How many ways can the three students be arranged in the chairs?



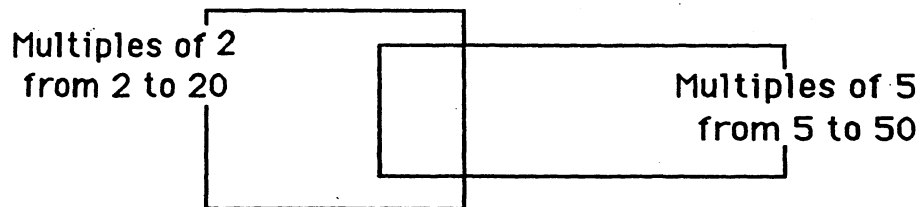
Answer: _____ ways

- ★★★ 5. Two pieces of cake weigh as much as one apple and one cherry. One apple weighs as much as five cherries and one piece of cake. How many cherries weigh as much as one apple?



Answer: ____ cherries = 1 apple

- ★★ 6. Fill in the Venn Diagram to represent the data provided.



- ★★ 7. Find two numbers that add to 19 and multiply to 84.

Answer: _____ and _____

- ★★★ 8. Shirley has 18 coins. One sixth of the coins are quarters, one third of the coins are dimes, and one half of the coins are nickels. What is the value of Shirley's coins?

Answer: _____