

**SUNSHINE MATH - 4**  
**Jupiter, XI**

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

- ★★ 1. The corner of this paper measures 90 degrees. Fold the lower right-hand corner of this paper so it represents two 45 degree angles. Trace the fold line with your pencil.

- ★★ 2. Estimate the result of the following problem as a whole number.

$$4 \frac{1}{43} + 2 \frac{15}{16} - 1 \frac{24}{26} + 5 \frac{11}{12} - 3 \frac{3}{61}$$

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

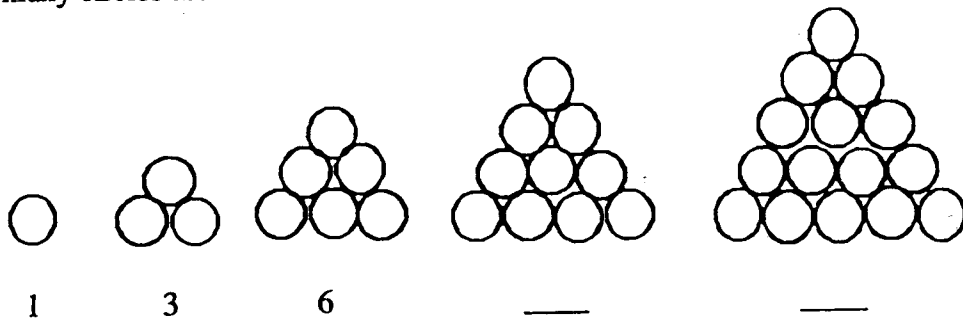
- ★★★ 3. How many ways can 3 students be arranged in three chairs?



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



- ★★ 4. Observe the circles in the triangle-shaped stacks. Fill in the missing numbers to show how many circles are in the last two stacks.



- ★★ 5. Draw the next figure in the above pattern.

- ★★★ 6. In the pattern for problem 4, how many circles would be in the 10th figure?

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

- ★★★ 7. The Florida Lottery is made up of the numbers 1 - 49. My mother has observed that the winning numbers many times are prime numbers.
- List the prime numbers from 1 - 49: \_\_\_\_\_
  - What is the probability of a prime number being picked randomly from the numbers 1 - 49? \_\_\_\_\_
  - Is the probability of picking a prime number greater than picking a number that is not prime? \_\_\_\_\_

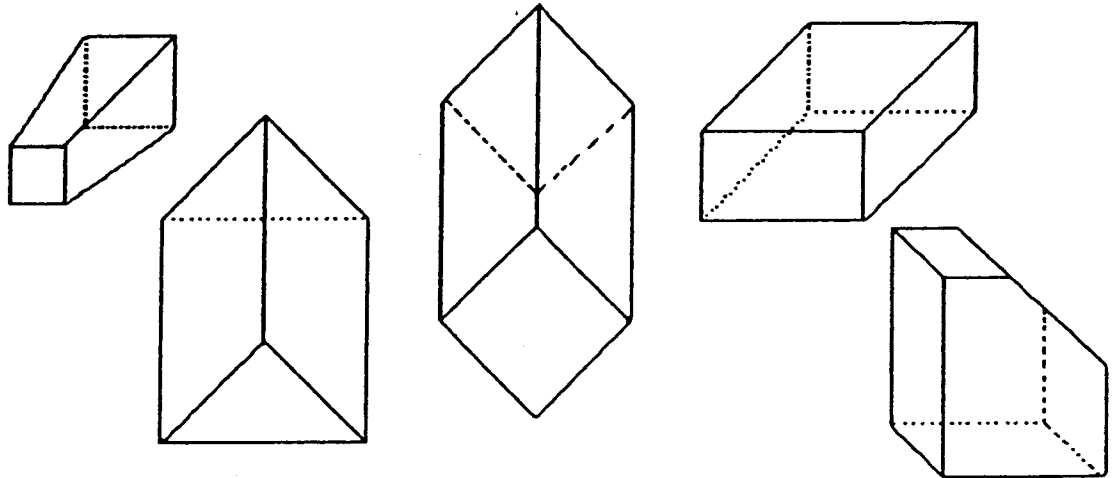
- ★★★ 8. Put  $<$ ,  $>$ , or  $=$  in each blank below, to give true statements.

(a)  $3030$  \_\_\_\_\_  $3300$

(b)  $(345 + 253)$  \_\_\_\_\_  $600$

(c)  $1.09$  \_\_\_\_\_  $1.090$

- ★★★ 9. Circle the following solid figures that have at least one square face.



- ★★ 10. Lu Win likes to balance things. She balanced three 20-gram weights with a 10-gram weight and two new tubes of glue. How much did each tube of glue weigh?

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

