

MATH SUPERSTARS – 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.

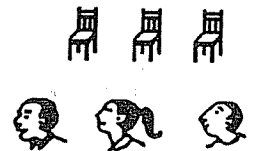
- ★★ 2. Estimate the result of the following problem as a whole number.

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

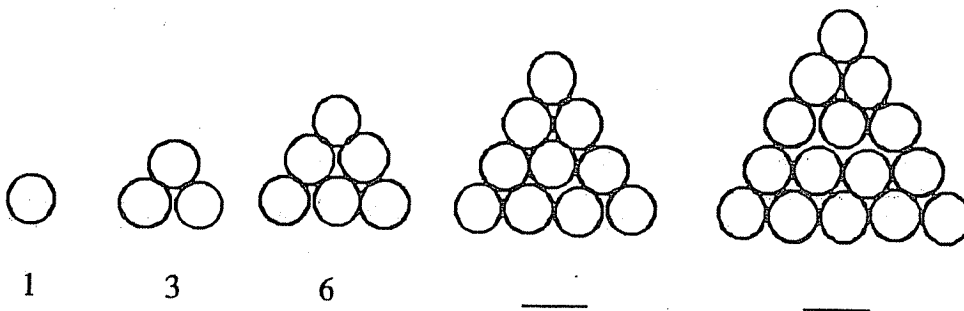
Answer: _____

- ★★ 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?

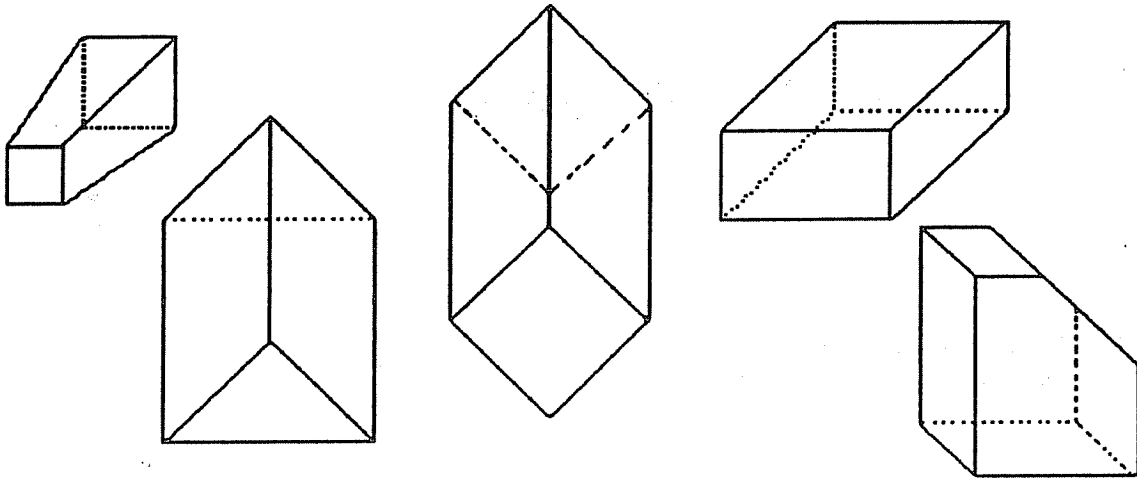
Answer: _____

- ★★★ 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? _____

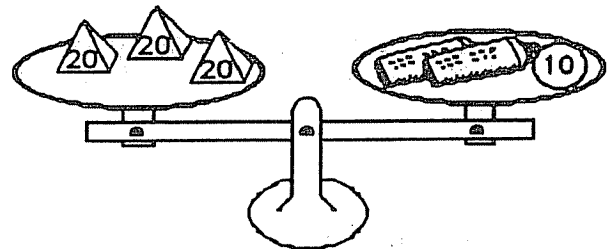
- ★★★ 8. Put $<$, $>$, or $=$ in each blank below, to give true statements.

(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