

MATH SUPERSTARS – 5

Saturn, XIII

Name: _____

(This shows my own thinking.)

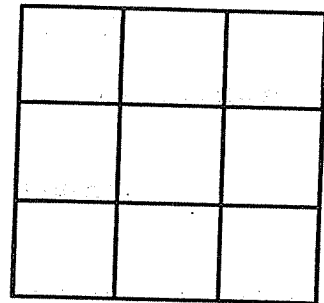
- ★★ 1. Mr. McMathy needs 129 seats for his 5th grade program. If the seats are arranged in rows of 10 seats, how many rows will he need?

Answer: _____ rows

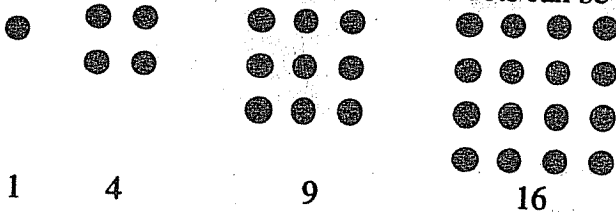
- ★★ 2. In the United States, 154,000,000 tons of garbage are produced annually. On an average, about how many pounds is that each month for each person in the United States? The population of the United States is about 250 million.

Answer: _____ pounds

- ★★★ 3. The horizontal, vertical, and diagonal columns of a magic square all add to the same sum. Use the digits 1 - 9 one time each to make a magic square.



- ★★★ 4. A *square number* is a number in which the dots can be arranged to form a square.



- a. Find the next three square numbers. _____
- b. Is 100 a *square number*? _____
- c. Is 200 a *square number*? _____

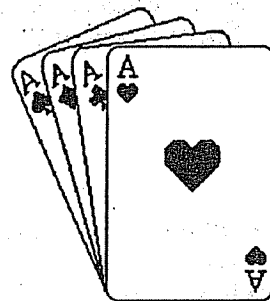
- ★★ 5. How many different rectangles exist which have whole numbers as the length and width, and also have an area of 36 sq. cm?

Answer: _____ rectangles

- ★★★ 6. You offer to do the dishes for your family for the next month. You suggest that they can pay you in one of three ways:
- \$0.50 each day.
 - \$0.10 the first day, \$0.20, \$0.30 the 3rd day, and so on.
 - \$0.01 the first day, \$0.02 the second day, \$0.04 the third day, and so on, doubling every day.

If the month has 31 days, which rate of pay would be best for you? Circle your choice.

- ★★ 7. You place these cards in a bag, and choose one without looking.



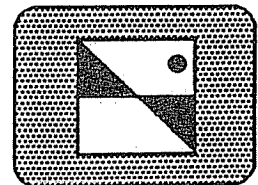
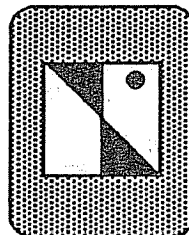
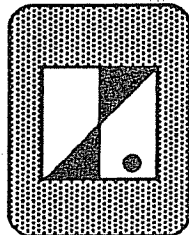
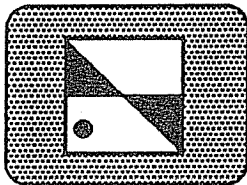
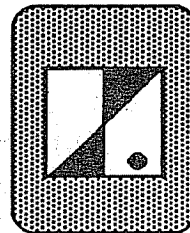
- What is the chance you will pull out a red card?

Answer: _____

- What is the chance you will pull out a ♣?

Answer: _____

- ★★ 8. Marcia drew the design to the right on a piece of clear plastic. She turned it 90° clockwise, then flipped it over horizontally and flipped it again vertically. Which is her card below? Circle it.



- ★ 9. Find the product: $5.7 \times 17.3 \times 651 \times 387 \times 0 \times 82.1 =$ _____