MATH SUPERSTARS – 6
Uranus, IX
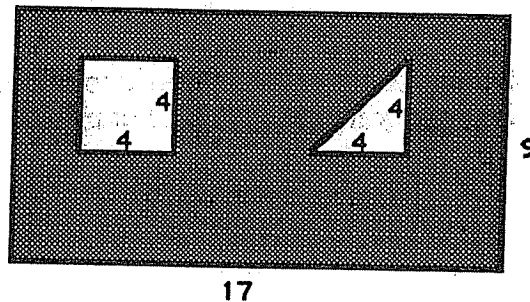
Name: _____

(This shows my own thinking.)

★★ 1. Look at the pattern. Fill in the next two numbers.

1, 1, 2, 3, 5, 8, 13, _____, _____

★★ 2. The 17-inch-by-9-inch piece of cardboard below has two holes that were cut from it. What is the area, in square inches, of the remaining cardboard?

17

Answer: _____ square units

★★ 3. Susan challenged a friend with this problem:

Multiply the square root of 49 by 10 and subtract 50.
Then multiply that number by 7.
Now find 1/5 of the product.

What is the answer to Susan's problem? _____

★★ 4. Here's a number trick:

Chose a number from 1 to 9.
Double it.
Add 5.
Multiply your result by 5.
Subtract 25.
Remove the ones digit.
Viola! You have your original number back.

Does this number trick always work? Answer: _____ (yes or no)

★★★ 5. A high school track record that remained unbroken for over thirty years is Jim Ryun's 1965 mile run of 3 minutes, 58.3 seconds. Essentially he ran 1 mile in 4 minutes. What was his average speed, to the nearest whole number, in miles per hour?

Answer: _____ miles per hour

★★ 6. If Andy's average pulse rate is 72 beats per minute, about how many times will his heart beat in a day? Give your answer rounded to the nearest thousand beats.

Answer: _____ beats

★★★ 7. Jim's Sport Shop sells four pairs of roller blades for every three skateboards. Last week he sold sixteen pairs of roller blades. How many more pairs of roller blades did Jim sell than skateboards?

Answer: _____

★★ 8. Tamika took five math tests. Her teacher reported she had an average score of 91, but had lost one of Tamika's tests. The four the teacher had showed scores of 86, 92, 88, and 96. What was her score on the lost test?

Answer: _____

★★ 9. A real estate broker sold a house for $120,000. Her commission was 8% of the selling price.

a. How much money did she earn in commission?

Answer: _____

b. If she had to pay 28% of her commission in income tax, how much did she have left to spend?

Answer: _____