# MATH SUPERSTARS – 6

## Uranus, XVI

*Name:* _____

*(This shows my own thinking.)*

★ 1. The number described by these clues can be found in the grid below. Circle the number.

a) It is greater than 588 + 3.
b) It is odd.
c) It has a ones digit and tens digit whose sum is 6.

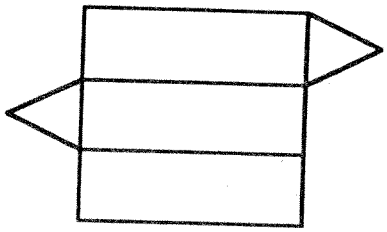
| | | |
|---|---|---|
| 144 | 324 | 214 |
| 304 | 233 | 323 |
| 151 | 342 | 123 |

★★★ 2. Mrs. Circle has a class of 30 students. For every three girls in the class there are 2 boys. How many boys are in the class?

Answer: _____ boys

★ 3. The picture shows a pattern for making a polyhedron. If you could cut this out and fold it up, what is the name of the polyhedron you would make?

Answer: _____

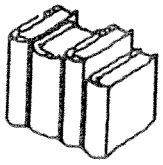


★★ 4. The cheerleaders are making lapel ribbons to sell at the Friday night football game. Each lapel ribbon requires 1/4 yard of ribbon. They have 60 yards of ribbon with which to make new lapel ribbons. In addition, they have 10 ribbons left from last week's game that they did not sell. All together, how many ribbons will they have to sell at this Friday's game?

Answer: _____

★★ 5. In how many different ways can 4 books be arranged on a shelf?

Answer: _____ ways



★★★ 6. Examine this set of numbers to see what they have in common. Then write the next 3 numbers in the set.

2, 3, 5, 7, 11, 13, 17, _____, _____, _____, .....

★★★ 7. Dorothy, Jake, Vicky, Otis, and Nick wore red, blue, yellow, purple, and green jackets. They collected spiders, marbles, hammers, fish, and watches. No two people wore the same color or had the same collection. Use these clues to match the people to the color of their jackets and their collections.

a) The boy in the green jacket collects spiders.
b) A girl who collects marbles has a yellow jacket.
c) Nick's favorite color is red and he always knows what time it is.
d) Jake's mother is always picking up rocks and putting them in fish bowls.
e) Dorothy collects hammers and hates the color blue.

| NAME | JACKET | COLLECTION |
|---|---|---|
| DOROTHY | | |
| JAKE | | |
| VICKY | | |
| OTIS | | |
| NICK | | |

★★ 8. The letters S, T, and U have been left out of the sequence of letters below. Write each in its correct place above or below the line.

A EF HI KLMN VWXYZ
BCD G J OPQR

★★★ 9. You have three bottles -- a 10-liter, a 4-liter and a 3-liter. All of the bottles are unmarked and there is no other supply of water available. The 10-liter bottle is full. You want to divide the water in such a way as to have one liter of water in the 3-liter bottle, four liters in the 4-liter bottle and five liters in the 10-liter bottle. You can do this by pouring the water from one bottle to another. What is the fewest number of pourings that will achieve this division of the water?

Answer: _____ pourings