MATH SUPERSTARS – 6
Uranus, VI

Name: _____

(This shows my own thinking.)

★★ 1. The world record for limbo dancing under a flaming bar is $6\frac{1}{8}$ inches. The record for roller skating under a limbo bar is $5\frac{1}{4}$ inches. How much lower is the record on roller skates, than without roller skates?

Answer: _____ inches

★★ 2. Fill in the squares using non-zero digits. Also, place the decimal point correctly in the answer.

$$
\begin{array}{r}
.2\,5 \\
\times\ 3.\square \\
\hline
1\,7\,\square \\
\square\,5\ 0 \\
\hline
\square\ 2\ 5
\end{array}
$$

★★ 3. The edge of each of the cubes in the picture below has a measure of 1 inch. What is the total surface area of the figure, including the bottom?
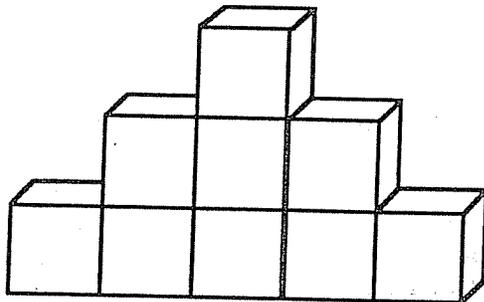
Answer: _____ square inches

★ 4. If the moon takes an average of $27\frac{1}{3}$ days to revolve around the Earth, which is the closest estimate for the number of hours it will take? Circle your answer.

a) 400 hours   b) 650 hours   c) 1025 hours   d) 900 hours

★★ 5. Find the number of letters in America's first President's last name. Multiply it by the number of letters that differ between the last names of America's second President and sixth President. What is your answer?

Answer: _____

★ 6. Scientists predict that by the year 2080, the Earth and its manned space stations will be inhabited by 4,327,650,189,012 people. Round this number to the nearest billion.

Answer: _____

★★ 7. Solve the following problem using Roman numerals. Be sure to give you answer as a Roman numeral.

$$(XL \div X) \ + \ XVI \ - \ XIX \ = \ \rule{3cm}{0.4pt}$$

★★★★ 8. The picture below represents a spinner. Find the probability of hitting each of the following colors. Give your answers as lowest term fractions.
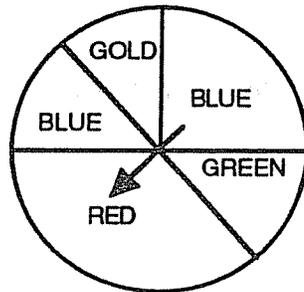
a) red: _____   b) blue: _____   c) gold or green: _____   d) orange:_____

★★ 9. A sandwich shop sells hamburgers and hot dogs. They offer French fries, chips and pretzels as side orders. They also have soda, milk or juice to drink. How many different combinations of a sandwich, a side order, and a drink are possible from their menu?

Answer: _____ combinations

★★ 10. There are 24 students in Mrs. Perimeter's class. If $87\frac{1}{2}$ % of them passed their mathematics test, how many students did not pass?

Answer: _____ students did not pass