

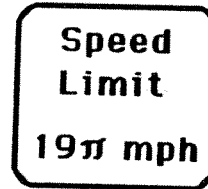
# MATH SUPERSTARS – 6

## Uranus, XXIII

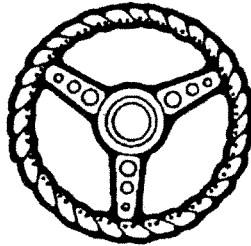
Name: \_\_\_\_\_  
(This shows my own thinking.)

- ★★★ 1. You've heard of  $\pi$ , and so has the mathematician who designed this new speed limit sign. To the nearest whole number, what is the speed limit here? Circle the best choice below.

- a. 25 mph                      b. 40 mph  
c. 55 mph                      d. 60 mph  
e. 65 mph                      f. 75 mph



- ★★ 2. A steering wheel is shown below. How many degrees clockwise would you have to rotate this steering wheel before it looks like it's in its original position?



Answer: \_\_\_\_\_ degrees

- ★★ 3. Try this number trick on several friends. What is the answer they always get, if they do it correctly?

Answer: \_\_\_\_\_

Number Trick:

*Take the number of brothers and sisters you have.  
Double this number.*

*Add 4.*

*Multiply by 5.*

*Add one.*

*Subtract 10 times the number of brothers and sisters.*

What is your answer?

- ★★★ 4. If you started counting on April fool's day at 8:00 AM, and counted 1 number a second, non-stop, 24 hours a day, on what day would you get to 1 million?

Answer: \_\_\_\_\_

★★ 5. Wayne wrote the months of the year on twelve identical cards and put them in a bag. He told his younger brother to pull one out without looking. If the brother drew out his birthday month, Wayne would do his chores for that month for his present. If his brother pulled out a summer month, Wayne promised to take him along whenever he went to the pool, as his present.

a. What is the brother's chance of drawing out his birthday month? \_\_\_\_\_

b. What is his chance of drawing out a summer month of June, July, or August? \_\_\_\_\_

★★★ 6. Arrange the digits 1 through 9 in the boxes below so that each row across and each column down has the same total.


★★ 7. There's only one thing wrong with the problem to the right. What is incorrect?

Answer: \_\_\_\_\_  
 \_\_\_\_\_

$$\begin{array}{r}
 3.71 \\
 \times 4.05 \\
 \hline
 405 \\
 2835 \\
 + 1215 \\
 \hline
 1502.55
 \end{array}$$

★★★ 8. Mario wanted to get a tune up for his bike before an upcoming road trip with his scout troop. The bike shop charges 25¢ to check and tighten each spoke, \$5.00 to tighten and oil the chain, \$8.00 to adjust the gears, and \$1.50 to inflate the tires properly. How much would this tune up cost him?

Answer: \_\_\_\_\_

