

# MATH SUPERSTARS – 5

Saturn, XII

Name: \_\_\_\_\_

(This shows my own thinking.)

- ★★★ 1. Bob's garden is a 20 ft. x 10 ft. rectangle. Bob plants tomatoes in half of his garden; then radishes in  $\frac{1}{4}$  of the remainder; then cucumbers in  $\frac{1}{2}$  of what is left. The last area is planted in peppers. What part of the garden is planted in peppers?

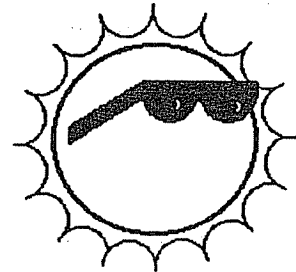
(Hint: draw a picture)

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

- ★★ 2. St. Augustine was founded in 1565 by Pedro Menendez de Aviles. The oldest house in that city still standing was built in 1703. How old is this house now?

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

- ★★ 3. For your weekend at the beach, you have packed one pair each of red shorts, blue shorts, and tan shorts. You have also packed a white shirt, and a red shirt. How many outfits can you make with these clothes?



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

- ★★ 4. A number  $n$  is divided by 3 and the result is multiplied by 7. Then 6 is subtracted from the result to give 36. What is the original number  $n$  ?

$[(n \div 3) \times 7] - 6$  gives 36. What is  $n$  ?

Answer :  $n =$  \_\_\_\_\_

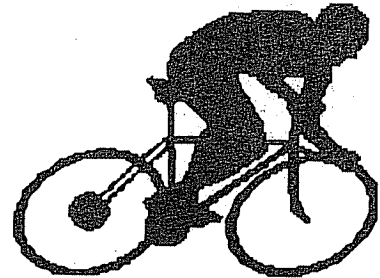
- ★★ 5. Which fraction is closest in value to 1? Circle the correct answer.

a.  $\frac{3}{5}$       b.  $\frac{2}{3}$       c.  $\frac{1}{2}$       d.  $\frac{7}{10}$

★★ 6. There are 5,280 feet in a mile. If an airplane is flying at 35,000 feet above sea level, how high is it? Bubble in the correct choice.

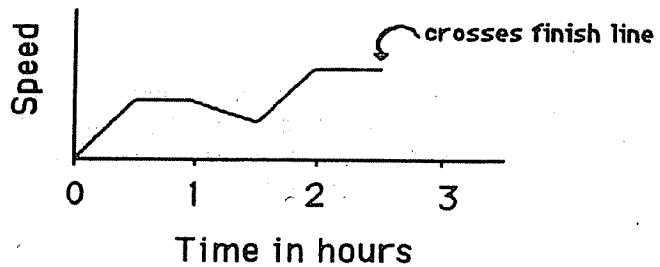
- 7 miles high
- a little less than 7 miles high
- a little more than 7 miles high

★★★ 7. Juan entered a bike race in which he was to ride 45 miles, stopping at certain intervals during the race to check in with the scorers. He checked in 9 times before he crossed the finish line. If the intervals were equally spaced throughout the race, how far apart were they?



Answer: The intervals were spaced every \_\_\_\_\_ miles.

★★★★ 8. The graph shows Juan's speed during the race, not counting when he stops at the checkpoints. Answer the questions below the graph.



a. About how long did Juan take to finish the race? Answer: \_\_\_\_\_

b. What can you say about Juan's speed during the first half hour of the race?

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

c. What can you say about Juan's speed during the second half hour of the race?

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

d. During what part of the race was Juan going the fastest?

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