

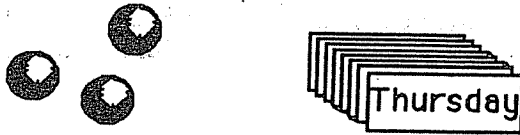
MATH SUPERSTARS - 4

Jupiter, VII

Name: _____

(This shows my own thinking.)

- ★★★ 1. One green, one red, and one blue marble are placed in a bag. The days of the week are written on seven pieces of paper and put in another bag. You can draw from either bag for a \$1 million prize. To win, you must either draw a weekend day -- Saturday or Sunday -- or a blue marble. Which bag gives you the best chance of winning, the marble bag or the day-of-the-week bag?



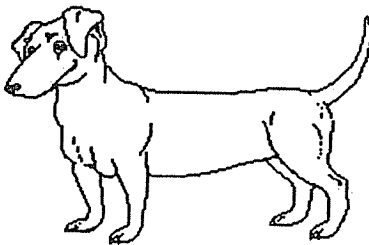
Answer: _____

- ★ 2. One disposable diaper will stay in a landfill, without decomposing, for 2000 years. If you put 4 disposable diapers into a landfill tomorrow, how long will it be before they are all decomposed?

Answer: _____ years



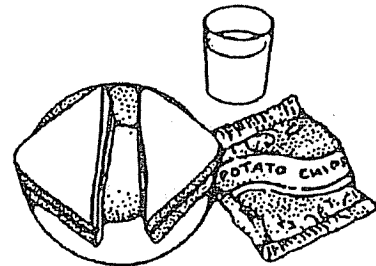
- ★★★ 3. Faye has 20 feet of fencing to make a rectangular pen for her dog. What is the largest area that she can fence in?



Answer: _____ square feet

- ★★ 4. Herman's lunch came to \$4.27, and he gave the clerk \$5.02. Why did he give the clerk two extra pennies?

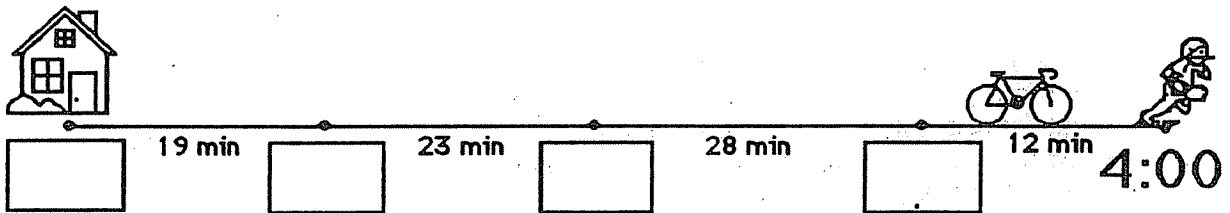
Answer: _____



- ★★★ 5. Juan's age is 3 times Derrick's age, and Tyrone is twice as old as Derrick. The sum of their ages is 30. How old is each boy?

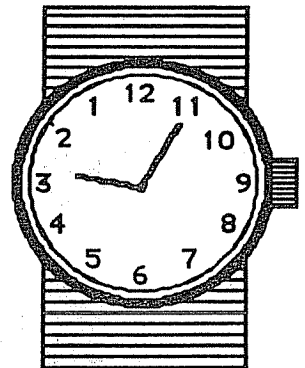
Answers: Juan is _____; Derrick is _____; Tyrone is _____

- ★★ 6. Maurice and his 3 friends ride their bikes to football practice each afternoon after school. Maurice leaves his house and goes to each friend's house, and they travel on together. He has timed each part of the trip. Practice starts at 4:00 sharp. Write in each box below when Maurice should arrive, so they won't be late for practice. Also write in the time he should leave his own house.



- ★★ 7. This watch is unusual -- it runs *counterclockwise*. What time will it be 4 hours and 45 minutes from the time shown?

For your answer, draw the hour and minute hands where they should be on this watch.



- ★★ 8. An adult has about 5 quarts of blood. When they donate a pint for a sick friend, what fraction of their blood do they give away?

Answer: _____

- ★★ 9. The human body is about 70% water, by weight.

- How many pounds do you weigh? _____ pounds
- How many pounds of you is water? _____ pounds