



Friday Problem Solving Challenge

Name:

Period:

See if you can solve at least 7 of these 10 problems. If you can do more, great! You'll get extra credit! Don't forget to show your work to get full credit.

1) **ARE YOU SMARTER THAN A 5TH GRADER?**

There are 7 girls on a bus

Each girl has 7 backpacks

In each backpack, there are 7 big cats

For every big cat there are 7 little cats

Question: How many legs are there in the bus?

- 2) The length of a kite and its tail is 200 cm. If the kite is 80 cm shorter than the tail, how long is each the kite and the tail?
- 3) Anna made the following announcement: "In 7 years, I will be half my mother's age. Thirteen years ago, she was 6 times as old as I was then." How old is Ann now?
- 4) Luis, Raymond, and Anita have a total of \$20. Together, Anita and Luis have the same amount of money as Raymond. Together, Raymond and Luis have \$14 more than Anita. How much money does each person have?
- 5) The bonus question on *GUESS THAT NUMBER* was, "I am the LCM of two numbers whose sum is 30 and whose difference is 6. What number am I?"
- 6) Hanah's uncle gave her \$3.75 to spend at the zoo. Her aunt gave her \$3.25 and her cousin gave her \$8.00. When Hanah was finished spending the money given to her, she had more than \$6.50 left. What is the greatest amount of money she could have spent?
- 7) During a 5-day speed-reading course, Lisa read a total of 150 news articles. Each day of the course she was assigned to read 8 more articles than on the day before. How many articles did Lisa read on the first day of the course?
- 8) You know the newsstand price of a weekly magazine. You also know the price of a yearly subscription. How can you determine how much money you would save with a yearly subscription rather than buying individual issues?