Name: _____

Sample Grade 5 Problems

1. Lumberjack Joe plans to cut one long log into 10 smaller, equal-sized logs by cutting the original log at regular intervals. If each cut takes 2 ½ minutes, how many minutes does Joe take to do the job? *(Common wrong answer: 25 minutes)*

2. Every minute, a certain spongy alien creature doubles in volume. If the alien takes 40 minutes to fill a room, how long does it take the alien to fill half the room? *(Common wrong answer: 20 minutes)*

3. Peter and Karen are siblings. Peter has a many brothers as sisters. Karen has twice as many brothers as sisters. How many girls and how many boys are in the family? (Solve without using algebra.)

4. Two students averaged 71 marks on a class test. Three other students averaged 75 marks on the same test. What was the average number of marks for all five students? *(Common wrong answer: 73)*

5. I have a set of cards numbered consecutively from 487 to 935. How many cards are in the set? *(Common wrong answer: 448 cards)*

6. Gold leaf is made by hammering pure gold into extremely thin sheets. You decide to cut gold leaf into many squares of two sizes. You have many squares of gold leaf worth $100 each and many squares of gold leaf worth $200 each. Which is worth more: a kilogram of the $100 squares or half a kilogram of the $200 squares?

7. Volumes I and II of the book set titled *Mathematics is Fun* stand side by side on a bookshelf. Volume I is to the left of Volume II. Each book is 200 pages long. Excluding front and back covers, how many pages are there between the first page of Volume I and the last page of Volume II? *(Common wrong answer: 198)*

8. Janet won the lottery! She kept half of the money for herself, gave $500,000 to her mother, half of what remained to her sister, half of what remained after that to her daughter and the remaining $200,000 to a charity. How much did Janet win?