Name: _____

Quiz 1

Show all your work

Number: _____

Signature: _____

Score: ___/10

Problem 1: Katharina has a 2.7 m ribbon to cut into three pieces to wrap three presents. Suppose the longest piece is twice as long as the shortest piece, and the medium piece is the average of the longest and shortest pieces, find the length of each piece of ribbon.

Score: /3

Problem 2: Calculate the following:

$$
\text{a)}\quad \begin{array}{r} 32 \\ \times\ 28 \\ \hline \end{array}
\qquad
\text{b)}\quad \begin{array}{r} 52 \\ \times\ 48 \\ \hline \end{array}
\qquad
\text{c)}\quad \begin{array}{r} 92 \\ \times\ 88 \\ \hline \end{array}
\qquad
\text{d)}\quad \begin{array}{r} 102 \\ \times\ 98 \\ \hline \end{array}
$$

Compare the answers with the numbers you multiplied. (Hint: Perhaps also compare with 30×30 for part a). Look for a pattern to help you determine the following two products: 9002×8998 and $1\,000\,002 \times 999\,998$.

Score: /4

Problem 3: Anjali's family was invited to a friend's party. Suppose there were 4 families in total: 8 parents and 10 ($= 2 + 2 + 3 + 3$) children. If all the adults shook hands with one another except with their spouses and all the children shook hands except with their siblings, how many handshakes took place?

Score: /3