Math 123-01 Fall 2025 Dr. Lily Yen

Quiz One
Show all your work

Name:		
Number:		
Signature:		
Score:	/10	

Problem 1: Anjali's family was invited to a friend's party. Suppose there were 4 families in total: 8 parents and 11 (= 2 + 3 + 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

Problem 2: Katharina has a 3.6 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 3: Calculate the following:

a)
$$32$$
 b) 52 c) 92 d) 102 $\times 28$ $\times 48$ $\times 88$ $\times 98$

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: 8002×7998 and $1\,000\,002 \times 999\,998$.