

Math 123-02
Spring 2026
Dr. Lily Yen

Quiz One

Show all your work

Name: _____
Number: _____
Signature: _____
Score: ____/10

Problem 1: Mei has a 4 ft stick to saw into three pieces to stake her potted plants. Suppose the longest stick is as long as the combined length of the two shorter sticks, and the the middle one is three times the shortest one, find the length of each stick.

Score: ____/3

Problem 2: Anjali's family was invited to a friend's party. Suppose there were 3 families in total: 6 parents and 8 ($= 2 + 3 + 3$) 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: ____/4

Problem 3: Jimmy and Candice just became friends with Beatrice, and they want to know when her birthday is. Beatrice gives them a list of ten possible dates:

February 9 14
May 15 24
July 1 15 27
November 1 14 24

Beatrice then tells Jimmy and Candice separately the month and the day of her birthday, respectively.

Jimmy: I don't know when Beatrice's birthday is, but I know that Candice doesn't know either.

Candice: At first I didn't know when Beatrice's birthday is, but I know now.

Jimmy: I *STILL DON'T* know when Beatrice's birthday is.

Find the month Beatrice was born and explain why Jimmy still didn't know. Do you know when Beatrice's birthday is?

Score: ____/3