

YOUR NAME:

REGISTRATION #

## (C) Levenshtein's Fine Signs (1/2) [15 points]

Levenshtein's Fine Signs, a commercial signage company, is a favorite of new business owners for its ability to cheaply adjust a location's existing signage to reflect the new business name. Instead of replacing the entire sign, Mr. Levenshtein replaces signs letter-by-letter whenever possible. Since Mr. Levenshtein offers "by-the-letter" pricing, he can offer very low prices when the name of the new business is very similar to the name of the old business.

Here, for example, are two recent jobs that Mr. Levenshtein completed:

Original Name	New Name	Price:
BOB'S RAFTS	BARB'S CRAFTS	\$17
FRESH SALSA	FIRE SALE	\$18

**C1.** How much does Mr. Levenshtein charge for each of the following changes?

Adding a letter:	\$
Removing a letter:	\$

**C2.** How much would Mr. Levenshtein charge to change this sign?

Original Name	New Name	Price:
RICH'S HARDWARE	KOICHI'S KARAOKE	\$

**C3.** Each month next summer, Mr. Levenshtein will try out a new pricing scheme, where he discounts particular kinds of changes or offers additional kinds of changes beyond just addition and deletion. Here are the May, June, and July prices for particular changes.

Original Name	New Name	May	June	July
BOB'S RAFTS	BARB'S CRAFTS	\$15	\$17	\$20
FRESH SALSA	FIRE SALE	\$16	\$18	\$10
POST OFFICE	COFFEE SHOP	\$38	\$30	\$36
HARDWOOD FLOORS	HOLLYWOOD FLOWERS	\$30	\$35	\$38
CORNER MALL	CORN MAZE	\$14	\$15	\$10

(Note: For this puzzle, you can treat spaces as insignificant, as if BOB'S RAFTS were just BOB'SRAFTS.)



YOUR NAME:

REGISTRATION #

## (C) Levenshtein's Fine Signs (2/2)

**A.** How much would Mr. Levenshtein charge to make the following change, in each month?

Original Name	New Name	May	June	July
DEADEYE SALOON	PAYDAY LOANS	\$	\$	\$

**B.** Three new business owners are looking to change their signage. For each business, in what month should they buy their sign in order to minimize costs?

Original Name	New Name	Best month to buy:
FROZEN YOGURT	FREE YOGA	
ITALIAN FOOD	IRANIAN FOOD	
CORNER MALL	ORNERY LLAMAS	

